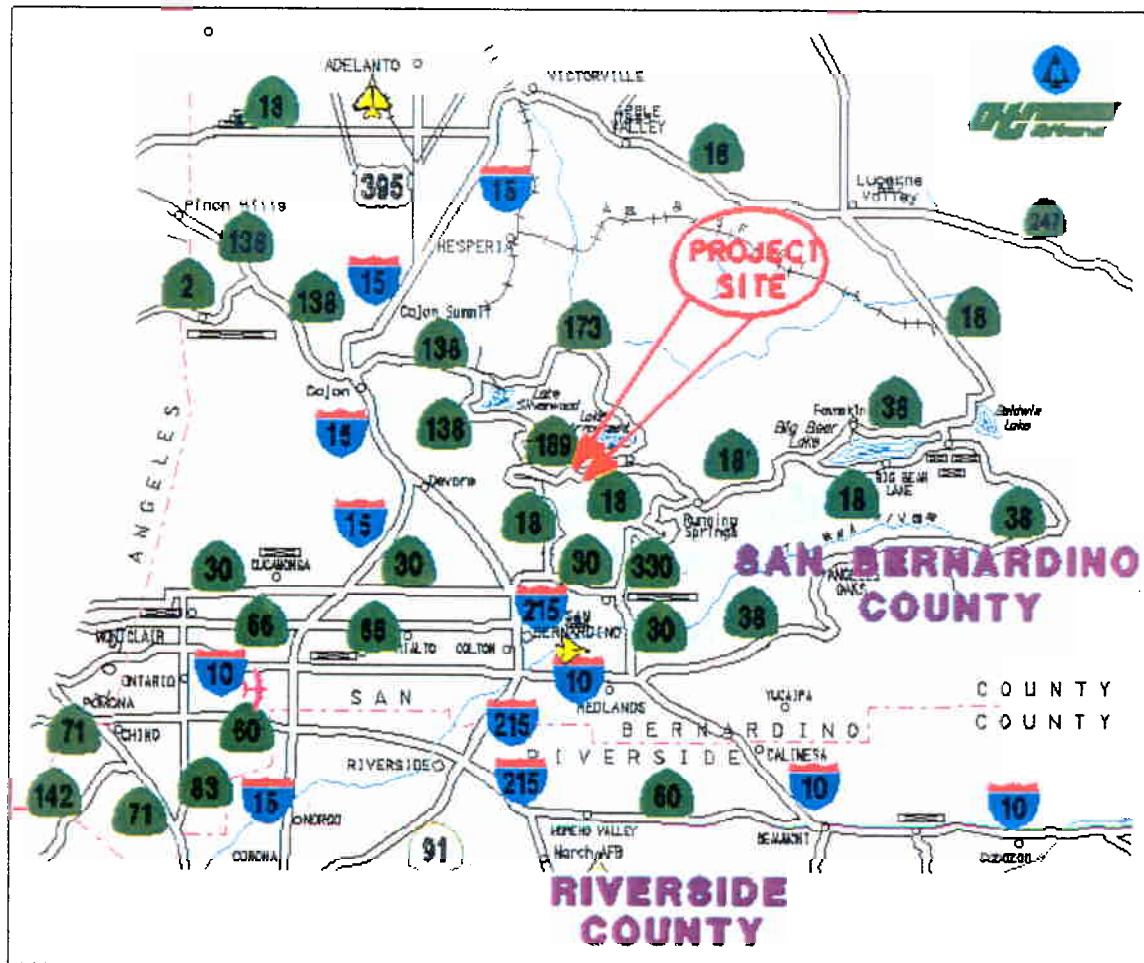


PROJECT STUDY REPORT

08-SBD-18-KP- 33.20-33.70 (PM 20.61-20.92)

08-SBD-189- KP 0.00-0.50 (PM 0.00-0.31)

LOCATION MAP

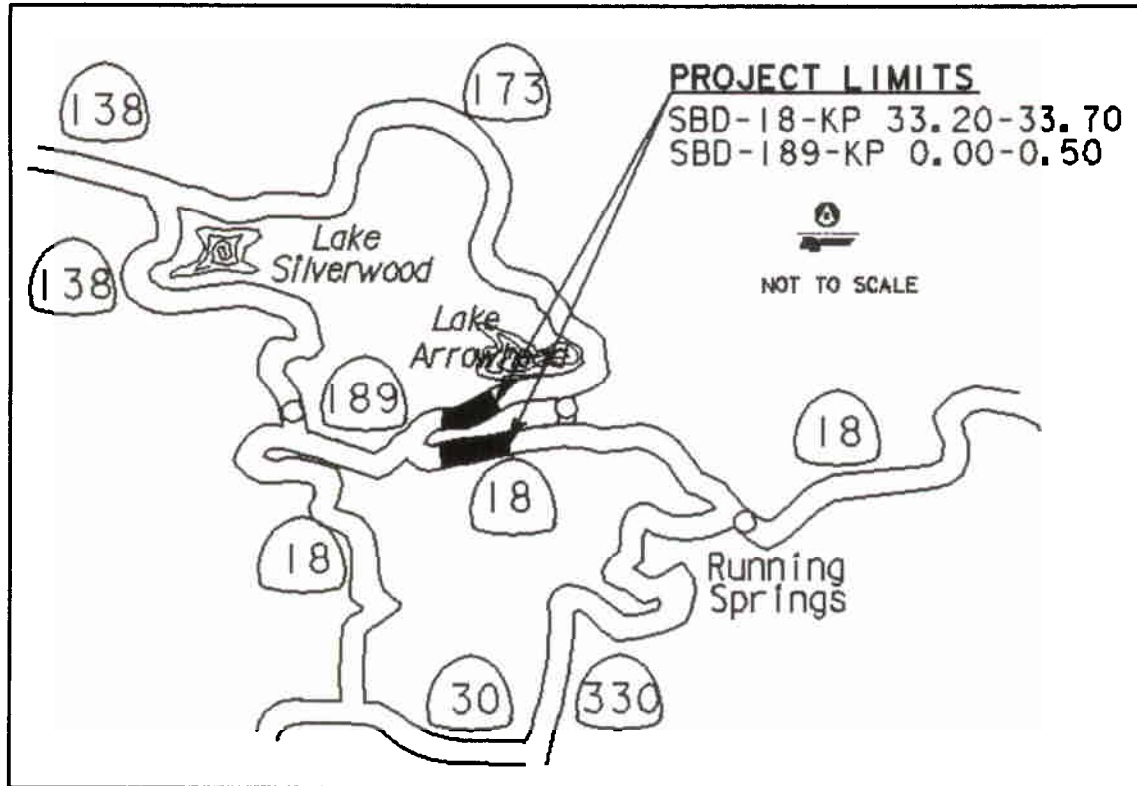


IN SAN BERNARDINO COUNTY
NEAR RIM FOREST
FROM JUNCTION ROUTE 18 AND ROUTE 189
TO 0.5 Km EAST OF JUNCTION



PROJECT STUDY REPORT

VICINITY MAP



**IN SAN BERNARDINO COUNTY
NEAR RIM FOREST
FROM JUNCTION ROUTE 18 AND ROUTE 189 TO 0.5 Km
EAST OF JUNCTION**

APPROVAL RECOMMENDED:

Owen Spencer 8/1/02
OWEN SPENCER DATE
OFFICE CHIEF PROJECT DEVELOPMENT
DESIGN B

CONCURRED BY:

Dary Wintergerst 8/6/02
DARY WINTERGERST DATE
PROJECT MANAGER

APPROVED BY:

Anne Mayer 8/6/02
ANNE MAYER DATE
DISTRICT DIRECTOR

CONCURRED BY:

Khalil Saba 8/7
KHALIL SABA DATE
ACTING DEPUTY DISTRICT DIRECTOR
ENVIRONMENTAL PLANNING

08-SBd-18-KP 33.20/33.70
189-KP 0.00/0.50
(18-PM 20.61/20.92 & 189-0.00/0.31)
Reconstruct slopes, replace stacked rock
wall, widen lane and shoulder widths on
Route 189, and construct Retaining wall on
Route 18

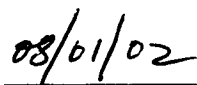
08-221-1A900K

This Project Study Report has been prepared under the direction of the following Registered Civil Engineer. The Registered Civil Engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.





REGISTERED CIVIL ENGINEER



DATE

08-SBd-18-KP 33.20/33.70
189-KP 0.00/0.50
(18-PM 20.61/20.92 & 189-
0.00/0.31)
Reconstruct slopes, widen
Lane and shoulder widths, replace
Stacked rock wall on Rte 189, and
Construct retaining wall on Rte 18
08-221-1A900K

PROJECT STUDY REPORT

1. INTRODUCTION

The purpose of this project is to minimize maintenance problems on State Route (SR) 18 from kilometer post 33.20 to 33.70 and on State Route (SR) 189 from kilometer post 0.00 to 0.50 in San Bernardino County. The proposed project is to reconstruct slopes, replace existing stacked rock on Westbound SR 189, and widen existing lane and shoulder widths to the current standard. It includes upgrading supported metal beam guardrail on Eastbound SR 189. The proposed project will also remove the existing retaining wall and construct a new retaining wall on the North side of SR 18 to stabilize the eroded slope between SR 189 and SR 18. Two alternatives have been studied for this report. The total preliminary estimated costs of the proposed project are \$4,613,000 and \$4,803,000 for alternative 1 and 2 respectively. This project does not require new right of way. However, temporary easement may be required for constructing various wall types on SR 189.

Funding is proposed under the State Highway Operation and Protection Program (SHOPP) through the HA 42 Program. The project is classified as category 4B as defined in chapter 8, section 5 of Caltrans Project Development Procedures Manual seventh edition (See Exhibit I).

2. BACKGROUND

A. History

The Project Initiation Proposal (PIP) for SR 18 and SR 189 was initiated by the maintenance branch and approved on August 4, 2001. This PIP identified deterioration of the existing stacked rock wall on Westbound SR 189 and erosion of the existing slope between SR 189 and SR 18. The existing paved width on SR 189 is 5.2 meters. As a result, the maintenance branch has recommended replacing stacked rock wall on Westbound SR 189, widening lanes, removing the exist retaining wall and constructing a new retaining wall between SR 189 and SR 18. The Caltrans Geotechnical Design South branch has proposed two alternatives that are being studied for this report.

B. Existing Facility

In San Bernardino County, SR 18 varies from a two to four-lane conventional highway. It serves intra-regional and local traffic. High traffic demand occurs on weekends and holidays due to recreational trips to the San Bernardino Mountain and desert areas. SR 189 is a two-lane undivided conventional highway that traverses mountain terrain. It begins at State Route 18 near Crestline and terminates at State Route 173 near Lake Arrowhead in San Bernardino County. The entire route length is 9.0 kilometers within an urban area. SR 189 has federal functional classification of urban Minor Arterial. The Federal Highway Administration (FHWA) does not designate it as a part of the freeway and expressway system, nor a route for large trucks. The route is not a part of the Interregional Road System (IRRS). Its primary purpose is to serve local traffic. Traffic volume on SR 189 may vary significantly during the year with recreational peaks occurring on summer weekends.

The portion of SR 18 addressed in this report has federal functional classification as a Rural Minor Arterial and a concept of “maintain only”, which allows for safety and operational improvements. Also, this portion of SR is eligible as State Scenic Highway, a San Bernardino County scenic Road and a National Forest Scenic Byway. The SR 18 project segment is part of the original alignment of the Rim of the World Highway.

Within the project limits, SR 189 has two narrow lanes with no shoulder in either direction. SR 189 is roughly parallel to SR 18 in the project location. The vertical separation between SR 189 and SR 18 varies as much as 10 meters with slope ratio approximately 1: 0.75. A stacked rock wall about 96 meters in length and up to 2.4 meters in height exists above the roadway on the north side of SR 189. The slope above the rock wall varies from 1:4 to 1:2, extending to a wrought iron fence between 2 and 10 meters behind the top of wall. There are two large

trees on the slope between the rock wall and the fence. The stacked rock wall shows signs of distress, bulging, and several rocks in the middle of the wall have fallen out. The pavement width of SR 189 near the rock wall varies from 5.2 to 5.7 meters. On the south side of SR 189, the existing metal beam guardrail is tilted away from the roadway towards the south due to erosion of slopes.

Below the tilted guardrail on the south of SR 189, there is a 1.8-meter high retaining wall constructed of sand bags filled with concrete stacked on one another (sacked-concrete wall) (see exhibit K). The top of this wall is about a half meter below the SR 189 roadway. The wall is about 4.9 meters long and is being undermined at the base and sides. The bottom of the wall is about 2 meters above the top of a 5.5-meter high Type 1 retaining wall (see exhibit K) located 3.6 meters north of the fog line for westbound SR 18. The Type 1 wall is apparently in good structural condition with no major cracks or tilting, but its western end shows signs of erosion.

There is also a second sacked-concrete retaining wall east of the eastern end of the Type 1 retaining wall. It also shows signs of erosion. The top of this wall is also about a half meter below the SR 189 roadway.

TABLE 1

EXISTING LANE AND SHOULDER WIDTHS

FACILITY	ROUTE 189 (meter)	ROUTE 18 (meter)
Lane width	2.6	3.66
Right shoulder	0	0.6 and varies
Left shoulder	0	0.6 and varies

3. NEED AND PURPOSE

Within the project limits, the existing stacked- rock wall that is located on SR 189 near the edge of traveled way has deteriorated over time. The proposed replacing of this wall will prevent rocks from falling apart and onto the roadway. The existing lane and shoulder widths on SR 189 need to be widened to meet the current standards. The existing concrete retaining wall on the north side of SR 18 does not provide the minimum horizontal clearance. A retaining wall needs to be constructed at minimum 2.4 meters from the edge of traveled way to provide horizontal clearance on the north side of SR 18. Extension of the new wall to the east and west end is necessary to prevent failure of the existing slope, and to reduce the potential development of a landslide from the slope between SR 189 and SR 18. Slope erosion is causing the loss of lateral support to SR 189. Extending retaining walls and providing soil

retention methods will prevent the continuous erosion of the slope within the project limits.

A. TRAFFIC DATA

Design Designation Traffic Data

SBd-18-KP 33.20/33.70	2002	2020	2030
ADT (Average Daily Traffic)	10,800	16,000	18,400
DHV (Design Hour Volume)	1,100	1,440	1,660
D (Directional Split)	65/35	65/35	65/35
T (% trucks in Design Hour)	7%	7%	7%
SBd-189- KP 0.00/0.50	2002	2020	2030
ADT (Average Daily Traffic)	3,500	7,200	7,560
DHV (Design Hour Volume)	350	600	650
D (Directional Split)	52/48	52/48	52/48
T (% truck in Design Hour)	3%	3%	3%

Traffic Index

SBd-18-KP 33.20/33.70	Main lanes	Shoulders
10-year traffic index	10.0	6.5
20-year traffic index	11.5	7.0
SBd-189-KP 0.00/0.50	Main lanes	Shoulders
10-year traffic index	7.0	4.5
20-year traffic index	8.0	5.0

B. ACCIDENT ANALYSIS

The Caltrans Traffic Accident Surveillance and Analysis System (TASAS) Table provided by the Office of Traffic Operations. The table 2 shows a summary of the 3-year accident rate from January 01, 1999 to December 31, 2001 within the proposed project limits for SR 18 and SR 189 respectively.

TABLE 2**ACCIDENT DATA**
(Per Million Vehicle)

Location	ACTUAL			AVERAGE		
	Fatal	Fatal & Inj	Total	Fatal	Fatal & Inj	Total
SR 18 KP 33.2/33.7 (PM 20.61/20.92)	0.00	0.853	1.963	0.015	0.295	0.630
SR 189 KP 0.0/0.50 (PM 0.00/0.31)	0.00	0.537	3.492	0.006	0.570	1.475

The Traffic Accident Surveillance and Analysis System (TASAS) reported 23 accidents for SR 18 from the period from 01/01/1999 to 12/31/2001.

For SR 18 within the project limits, the accidents that occurred in this stretch are hit object (10 accidents, 43.4%), broadside (9 accidents, 39.1%), sideswipe (2 accident, 8.6%), head on (1 accident, 4.3%), and other (1 accident, 4.3%).

The Traffic Accident Surveillance and Analysis System (TASAS) reported 13 accidents for SR 189 from the period from 01/01/1999 to 12/31/2001.

For SR 189 within the project limits, the accidents that occurred in this stretch are broadside (2 accidents, 15.3%), hit object (7 accidents, 53.8%), rear end (3 accidents, 23.0%), and head on (1 accident, 7.6%).

The accident data in table 2 indicates that total actual accident rates within project limits are higher than the average accident rates for similar types of highway.

4. **ALTERNATIVES**

To prevent slope erosion between SR 189 and SR 18, alternative 1 and alternative 2 will require replacing the existing stacked rock wall on the north side of SR 189 and the existing retaining wall on the north side of SR 18.

ALTERNATIVE 1

In this alternative, the existing pavement surface of SR 189 is lowered 5 meters from the original ground at the deepest cut beginning 50 meters beyond both ends of the existing stacked rock wall. The existing stacked rock wall on the north side of SR 189 will be removed and replaced with a soil nail wall along the rock wall layout line. The height of the soil nail wall varies from 3.5 to 7.0 meters. The existing pavement width is widened from its current 5.2 meters minimum width to two 3.6-meter wide lanes and two 2.4-meter shoulders for a total width of 12 meters. The existing metal beam guardrail is removed and replaced. The existing sacked-concrete wall above

and at the west end of the existing Type 1 wall on the north side of SR 18 is removed. The existing Type 1 retaining wall is removed and a new retaining wall is constructed at minimum 2.4 meters from the edge of traveled way of SR 18. The new wall would be extended at least 3 meters to the west and 76 meters to the east to prevent erosion of the slope.

The preliminary estimated cost for alternative 1 is \$4,613,000.

ALTERNATIVE 2

For the alternative 2, the existing stacked rock wall is removed and replaced with a soil nail wall along the same layout line. The soil nail wall is constructed to the same height as the existing wall, and extends 2 meters from each end of the wall. The existing pavement width of SR189 is widened from its current 5.2 meters minimum width to two 3.6-meter wide lanes and two to 2.4-meter shoulders for a total width of 12 meters. The existing metal beam guardrail is removed and replaced. The existing Type 1 and sacked concrete walls between Route 189 and Route 18 are removed and a higher wall is constructed at minimum 2.4 meters from edge of traveled way of SR 18. The new wall would be extended 3 meters and 76 meters further from the existing Type 1 wall to the west and east respectively. The minimum 1:2 slope is constructed from the bottom of the new wall to the top of the retaining wall Type 1 on SR 18.

The preliminary estimated cost for alternative 2 is \$4,803,000.

ALTERNATIVE 3: NO BUILD

Alternative 3 consists of no physical improvement or modification at this time. The stacked-rock wall will ultimately deteriorate allowing materials to impact the roadway adversely affecting traffic. Therefore, this alternative is not recommended for further consideration.

TABLE 3

SUMMARY OF COST ESTIMATES

Alternative	Roadway	Structures	Utility Relocation	Total
1	\$4,590,000	0	\$23,000	\$4,613,000
2	\$4,778,000	0	\$23,000	\$4,803,000

The itemized project cost estimate for each alternative is attached (See Exhibit C)

Alternative 1 meets the need of safety improvements due to the height and steepness of the slope between the SR 189 and SR 18. This alternative will minimize maintenance and reduce slope erosion. In this alternative, SR 189 will need to be closed temporarily during construction when the grade is lowered. A detour will need to be provided during construction.

Alternative 2 also meets the need of safety concerns. This alternative also will minimize maintenance and reduce slope erosion. In this alternative, it will need one-way traffic control on SR 18 and SR 189 during construction.

For both alternatives, approximately 20 tall trees would be removed between SR 189 and SR 18, and three power poles will be removed and relocated. Environmental study and clearance will be required.

5. SYSTEM AND REGIONAL PLANNING

SR 189 is not part of the Interregional Road System (IRRS). The concept of “Maintain only” provides for operational and safety improvements for SR 189 in San Bernardino County. The plan of “Maintain only” does not preclude local government or private sector funding for needed major improvements resulting from significant local development. The route is not a high priority route for capacity improvement within the twenty-year period. There are no plans to make additional capacity improvements to SR 189. However, operational improvements such as passing lanes and turnouts could alleviate slow moving queues that normally develop on mountainous roads. Alternatives such as Traffic System Management, Traffic Demand Management, and operational improvements should always be considered to enhance future traffic flow.

The construction of the proposed improvement of SR 18 under this project will be coordinated with all other projects within the limits of this project. This project is consistent with the approved Route Concept Report.

6. TRAFFIC MANAGEMENT PLAN (TMP)

It is anticipated that SR 189 will be closed for alternative 1, and a detour will be provided during construction. Because traffic delays are anticipated from this project, a Traffic Management Plan (TMP) will be required to minimize the traffic impacts due to construction activities. The TMP will include construction staging, a Public Awareness Campaign to inform the public such as alternative routes, use changeable message signs, and Construction Zone Enhanced Enforcement Program (COZEPP).

A detailed TMP addressing safety for both motorists and employees should be developed during the preparation of Plans, Specification, and Estimate (PS&E) for this project. The anticipated cost of the TMP and detour maintenance has been included in the Preliminary Cost Estimate for this project (See Exhibit C).

7. ENVIRONMENTAL STATUS

In compliance with the environmental processing requirements in Division 13, Public Resources Code (State), and 42 U.S.C. 4332(2) (C) (Federal), an Initial Study/Environmental Assessment (IS/EA) may be required for this project.

A Mitigated Negative Declaration and Finding of No Significant Impact (ND/FONSI) is anticipated. If further study reveals that immitigable impacts will occur, an Environmental Impact Report/Environmental Impact Study (EIR/EIS) would be required.

An archaeological survey may be required for the project. The Area of Potential Effects must include all access roads, work areas and staging areas beyond the existing paved highway. A historic survey of resources, related to the project may be required.

8. RIGHT OF WAY

All construction work will be done inside the State right of way, unless further studies determine that more R/W is needed for soil nails. Utilities in the middle section between State Route 189 and State Route 18 will be removed and relocated. Other utilities will be protected in place during construction. However, temporary easement may be required for constructing the stacked rock wall.

9. FUNDING/SCHEDULING

This project is proposed for funding under the State Highway Operation and Protection Program (SHOPP).

TABLE 4

CAPITAL OUTLAY SUPPORT ESTIMATE FOR PA&ED

The following table is a summary of the estimated Person Year (Pys) required completing the project according to the Person Year, Project Scheduling, and Cost Analysis (PYSCAN) Program.

Fiscal Year	District								Engineer Service Center					
	PA&ED		PS&E											
			Design		R/W and Survey		Construction							
									Design	Construction	Office Engineer			
	\$1000 s	PY	\$1000 s	PY	\$1000 s	PY	\$1000 s	PY	\$1000 s	PY	\$1000 s	PY	\$1000 s	PY
03/04	445.6	2.82			11.0	0.07			4.74	0.03				
04/05	50.6	0.32	477.2	3.02	42.7	0.27			355.5	2.25				
05/06			22.1	0.14	23.7	0.15							33.2	0.21
06/07					17.4	0.11	1,148.7	7.27			418.7	2.65		
Total	496.2	3.14	499.3	3.16	94.8	0.60	1,148.7	7.27	360.24	2.27	418.7	2.65	33.2	0.21

TABLE 5

CAPITAL OUTLAY ESTIMATE

ALTERNATIVE	TOTAL COST
ALTERNATIVE 1	\$4,613,000
ALTERNATIVE 2	\$4,803,000

TABLE 6

TENTATIVE PROJECT SCHEDULE

The following table is a summary of the tentative schedule milestones for this project.

MILESTONES	FISCAL YEAR
Approved PSR	09/01/02
PA &ED	11/01/04
District PS&E	12/01/05
R/W Certification	01/02/06
HQ Advertisement	04/03/06
Project Completion	08/01/07

10. NON-STANDARD FEATURES

All improvements will be consistent with Caltrans latest design standards. However, several features that do not conform to current geometric standards may exist throughout the facility within the project limits due to mountain terrain such as shoulder width, horizontal and vertical sight distance. Correction of any of these geometric features is beyond the scope of the project. Luis Betancourt, HQ Project Development Coordinator, concurs with this recommendation and has determined that no other documentation is necessary.

11. PROGRAMMING RECOMMENDATION

Caltrans District 8 recommends programming of the PA&ED support component in the SHOPP as discussed in the Funding/Scheduling section.

12. PROJECT REVIEW

Construction Review and Safety, Maintenance Engineering, Right of Way, Traffic Operation, and other functional units have reviewed this Project Study Report. A Constructability Review will be conducted during the Project Report phase.

This PSR was also reviewed and concurred by:

Luis Betancourt Headquarter Project Development Coordinator	Date: 07/23/02
Rebecca Mowry Headquarter Reviewer	Date: 06/05/02
Mike Downs Headquarter Structures Liaison	Date: 04/25/02
Wayne Henley Headquarter Traffic Operation Liaison	Date: 07/30/02

13. PERSONNEL CONTACT

Owen Spencer	Office chief Design B	Calnet 670-6223 Public (909) 383-6223
Gary Wintergerst	Project Manager	Calnet 670-6334 Public (909) 383-6334
Dat Wong	Project Engineer	Calnet 670-1062 Public (909) 884-1062
Sumner Baker	Office Chief Environmental Branch	Calnet 670-4079 Public (909) 383-4079
Douglas Brittsan	Associate Materials and Research Engineer Geotechnical Branch C	Public (916) 227-4513

14. ATTACHMENTS

EXHIBIT A:	Layout
EXHIBIT B:	Typical Cross Sections
EXHIBIT C:	Preliminary Cost Estimates
EXHIBIT D:	Right of Way Data Sheet
EXHIBIT E:	Preliminary Environmental Analysis Report
EXHIBIT F:	Three-Year-Accident Data
EXHIBIT G:	Initial site Assessment (ISA)
EXHIBIT H:	Project Initiation Proposals (PIPs)
EXHIBIT I:	Project Category Approval
EXHIBIT J:	Work Plan
EXHIBIT K:	Photos
EXHIBIT L:	PSR Performance Measures

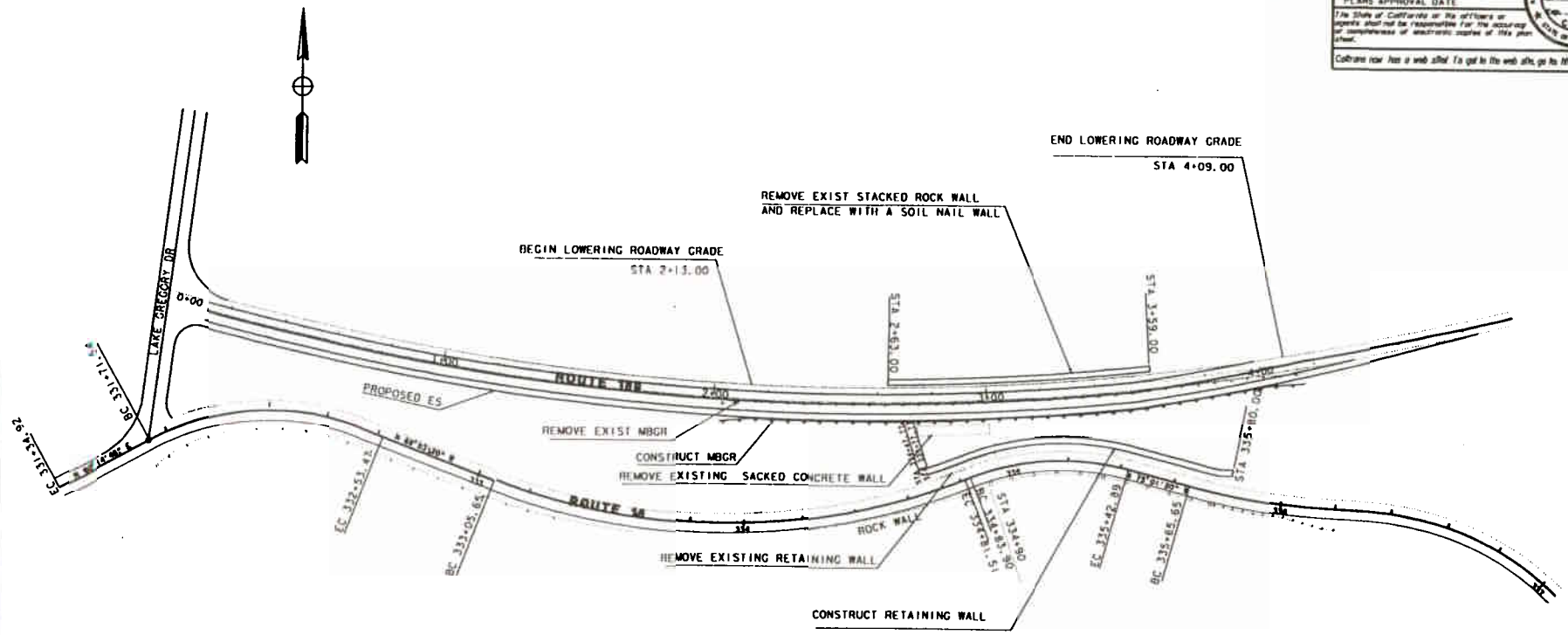
EXHIBIT A

LAYOUT

DATE REVISID BY
 DATE REVISID
 CALCULATED/DESIGNED BY
 CHECKED BY
 PROJECT ENGINEER
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 California



DIST. COUNTY	ROUTE	K/COMETER POST	SHEET	TOTAL
		TOTAL PROJECT	NO	SHEETS
REGISTERED CIVIL ENGINEER				
PLANS APPROVAL DATE				
The State of California or its officers or agents shall be responsible for the accuracy or completeness of electronic copies of this plan sheet. Caltrans now has a web site. To get to the web site, go to http://www.dot.ca.gov				



ALTERNATIVE 1
 NO SCALE

PRELIMINARY

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN
 FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS
 0 20 40 60 80
 US FPM (M) 1:2500

LAYOUT 1

DATE PLOTTED 11-14-00
 TIME PLOTTED 11:14:00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 PROJECT ENGINEER
 CALCULATED/DESIGNED BY
 CHECKED BY
 DATE REVISID
 DATE REVISID



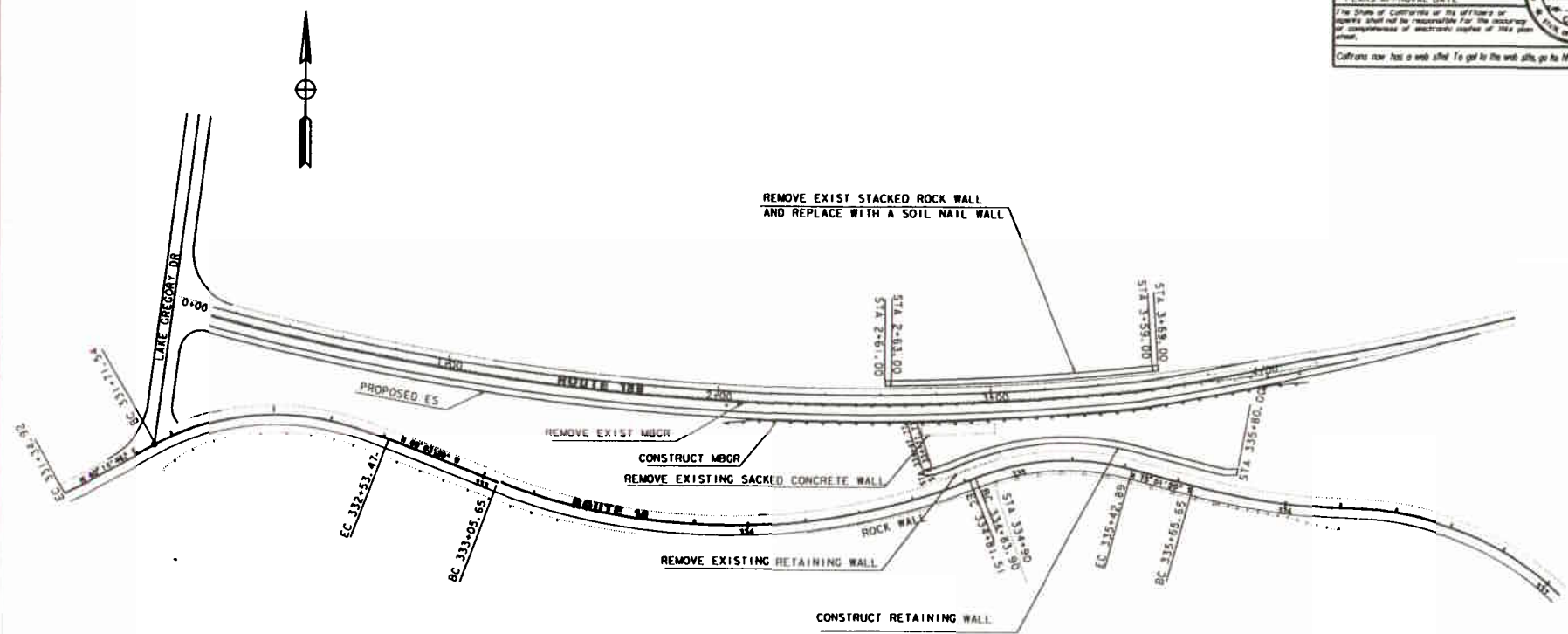
DIST.	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET TOTAL SHEETS

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronically copied or filed plans or drawings.

Caltrans now has a web site! To go to the web site, go to <http://www.dot.ca.gov>



ALTERNATIVE 2 NO SCALE

PRELIMINARY

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS

0 20 40 60 80

1 2 3 4 5

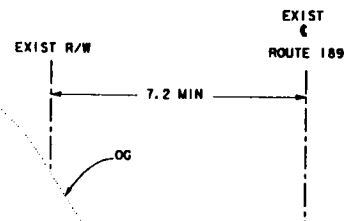
1:10000

LAYOUT 2

DATE PUBLISHED 11-15-00
 TIME PUBLISHED 11:15 AM

EXHIBIT B
TYPICAL CROSS SECTIONS

- TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
 3. * RETAINING WALL VARIES FROM 8.2 m TO 11.5m HEIGHT



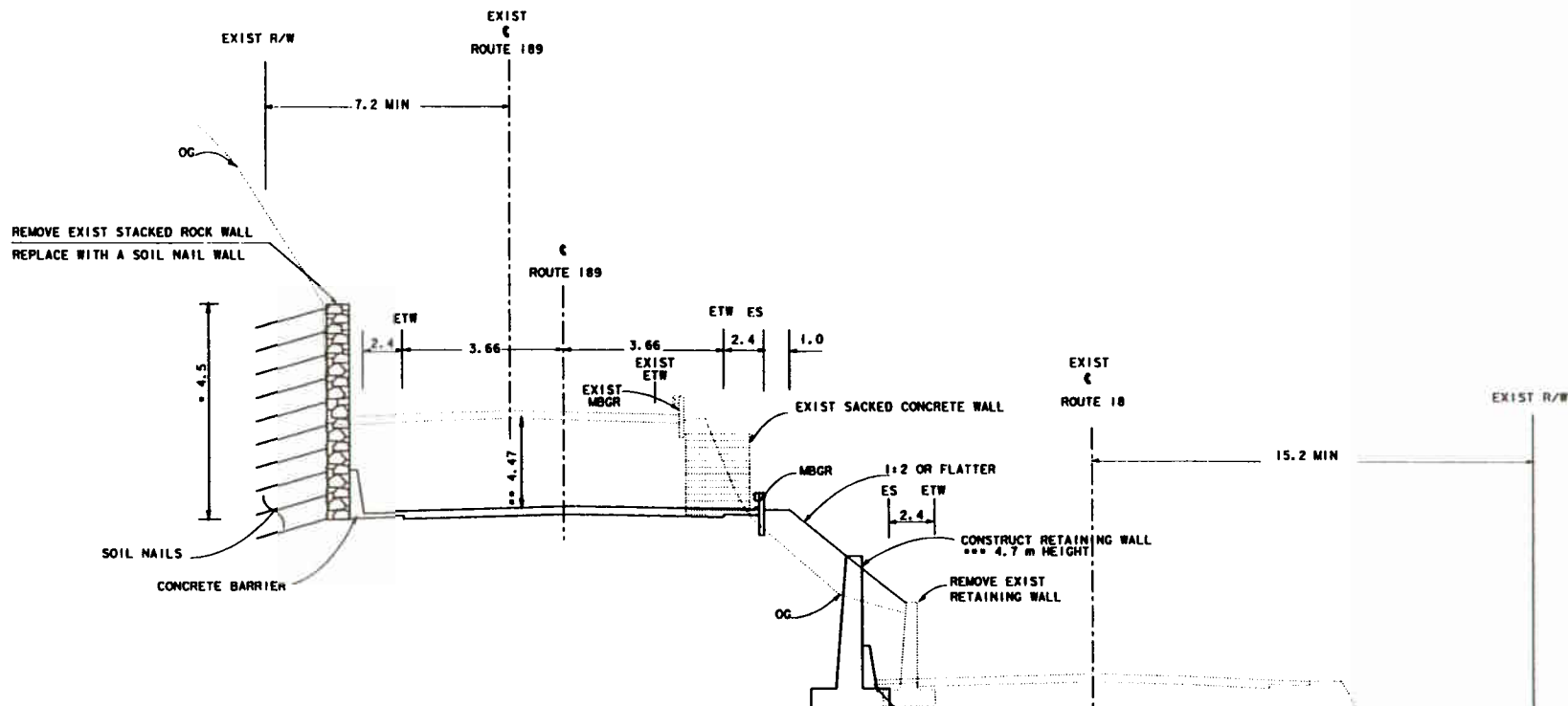
REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



- NOTE: 1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATIONS AS SHOWN OR AS DIRECTED BY THE ENGINEER.
 3. * STACK ROCK WALL VARIES FROM 4.5 m TO 7.0 m HEIGHT
 4. ** LOWER GRADE PAVEMENT VARIES FROM 4.47 m TO 5.0 m HEIGHT
 5. *** RETAINING WALL VARIES FROM 4.7 m TO 6.7 m HEIGHT



DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	SBd	18	33.20733, 70		
		189	0.00/0.50		

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



DATE REVISOR BY
DATE REVISOR

DATE REVISOR BY
DATE REVISOR

DATE REVISOR BY
DATE REVISOR

EXHIBIT C
PRELIMINARY COST ESTIMATES



PRELIMINARY
PROJECT COST ESTIMATE SUMMARY

08-SBd-18-KP 33.20 / 33.70
08-SBd-189-KP 0.00 / 0.50
EA 1A900K

Type of Estimate : PSR

Program Code :

PIP Number : 2417

PROJECT DESCRIPTION : Stabilize Slope and Roadway

LIMITS : Near Rim Forest, In San Bernardino County
From Junction Route 18 and Route 189 to 0.5 Km East of Junction

PROPOSED IMPROVEMENTS : Reconstruct slopes, replace stacked wall, widen lane and shoulder widths
on Route 189, and construct Retaining wall on Route 18

Alternative : **Alternative 1**

ROADWAY ITEMS	\$	4,590,000
STRUCTURE ITEMS	\$	0
SUBTOTAL CONSTRUCTION	\$	4,590,000
RIGHT OF WAY	\$	23,000
TOTAL PROJECT COST	\$	4,613,000

Prepared By: Jennifer McHa Date: July 15, 2002

Checked By: Dat Wong Date:

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

I. ROADWAY ITEMS

	QUANTITY	UNIT	UNIT PRICE	UNIT COST	SECTION COST
SECTION 1. Earthwork					
Roadway Excavation	12300	m^3	\$30	\$369,000	
Structural Excavation (Retaining wall)	1105	m^3	\$30	\$33,150	
Structure Excavation (Soil Nail Wall)	700	m^3	\$175	\$122,500	
Structural Backfill (Retaining wall)	1420	m^3	\$40	\$56,800	
Structural Backfill (Soil Nail Wall)	410	m^3	\$150	\$61,500	
Imported Borrow	1000	m^3	\$50	\$50,000	
Clearing & Grubbing	1	LS	\$20,000	\$20,000	
Develop Water Supply (5% -10% Roadway Excavation)	1	LS	\$36,900	\$36,900	
Total Earthwork Section					\$749,850
SECTION 2. Structural Section					
Asphalt Concrete Pavement	1800	tonne	\$70	\$126,000	
Aggregate Base	1500	m^3	\$40	\$60,000	
Aggregate Subbase	1800	m^3	\$30	\$54,000	
Total Structural Section					\$240,000
SECTION 3. Drainage					
Large Drainage Facilities	0	LS	\$0	\$0	
Storm Drains	0	LS	\$0	\$0	
Pumping Plants	0	LS	\$0	\$0	
Project Drainage (minor drainage modifications)	1	LS	\$70,000	\$70,000	
Total Drainage Section					\$70,000

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

	QUANTITY	UNIT	UNIT PRICE	UNIT COST	SECTION COST
SECTION 4. Specialty Items					
Environmental Mitigation Cost	1	LS	\$300,000	\$300,000	
Structure Concrete (Soil Nail Wall)	84	m^3	\$750	\$63,000	
Soil Nail Wall (facing)	672	m^2	\$550	\$369,600	
Soil Nail Assembly	96	m	\$100	\$9,600	
Remove Concrete Retaining Wall	120	m^3	\$100	\$12,000	
Minor Concrete (Minor Structures)	613	m^3	\$650	\$398,450	
Remove Stacked Rock Wall	1	LS	\$10,000	\$10,000	
Remove Metal Beam Guardrail	200	m	\$30	\$6,000	
Remove Base and Surfacing	1,000	m^2	\$35	\$35,000	
Remove Trees	20	EA	\$1,000	\$20,000	
Remove AC dikes	200	m	\$15	\$3,000	
Place AC dikes	200	m	\$30	\$6,000	
Concrete Barrier	106	m	\$150	\$15,900	
Construct Metal Beam Guardrail	200	m	\$70	\$14,000	
Storm Water Pollution Prevention Plan	1	LS	\$100,000	\$100,000	
Landscaping	1	LS	\$30,000	\$30,000	
Erosion Control	1	LS	\$20,000	\$20,000	
Detour	1	LS	\$100,000	\$100,000	
Temporary easement	LS	LS	\$200,000	\$200,000	
Total Specialty Items					\$1,712,650

SECTION 5. Traffic Items

Construction Area Signs	1	LS	\$20,000	\$20,000
Temporary Traffic Delineation	1	LS	\$50,000	\$50,000
Traffic Control Systems	1	LS	\$100,000	\$100,000
Traffic Management Plan	1	LS	\$150,000	\$150,000
Striping	1,000	M	\$30	\$30,000

Total Traffic Items **\$350,000**

SUBTOTAL SECTIONS 1-5	\$3,122,400
------------------------------	--------------------

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

					UNIT COST	SECTION COST
SECTION 6. Minor Items						
Subtotal Sections 1-5	\$3,122,400	x	0.05	\$156,120		
TOTAL MINOR ITEMS						\$156,120
SECTION 7. Roadway Mobilization						
Subtotal Sections 1-5	\$3,122,400					
Minor Items	\$156,120					
SUM	\$3,278,520	x	0.1	\$327,852		
TOTAL ROADWAY MOBILIZATION						\$327,852
SECTION 8. Roadway Additions						
Supplemental						
Subtotal Sections 1-5	\$3,122,400					
Minor Items	\$156,120					
SUM	\$3,278,520	x	0.05	\$163,926		
Contingencies						
Subtotal Sections 1-5	\$3,122,400					
Minor Items	\$156,120					
SUM	\$3,278,520	x	0.25	\$819,630		
TOTAL ROADWAY ADDITIONALS						\$983,556
TOTAL ROADWAY ITEMS (Total of Sections 1-8)						\$4,589,928
ROUND OFF TO :						\$4,690,000

Estimate Prepared By :

Jennifer McHa

Phone #

(909) 383-6317

Date

7/15/2002

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

II. STRUCTURES ITEMS

	No.1	No.2	No.3	No.4
Bridge Name				
Structure Type				
Width in meters-out to out	0	0	0	0
Span Length in meters	0	0	0	0
Total Area in square meters	0	0	0	0
Footing Type (pile/spread)	—	—	—	—
Cost Per square meters	\$0	\$0	\$0	\$0
SUBTOTAL FOR STRUCTURE	\$0	\$0	\$0	\$0
Related Connectors	\$0	\$0	\$0	\$0
Railroad Related Cost	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0
10% Mobilization	\$0	\$0	\$0	\$0
25% Contingency	\$0	\$0	\$0	\$0
Remove old Bridge	\$0	\$0	\$0	\$0
TOTAL COST FOR STRUCTURE	\$0	\$0	\$0	\$0

PAGE SUBTOTAL - STRUCTURES ITEMS \$0

COMMENTS:

ROUND OFF TO : \$0

Estimate Prepared By :

Jennifer McHa

Phone #

(909) 383-6317

Date

7/15/2002

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

III. RIGHT OF WAY

Right of Way estimates should consider the probable highest and best use and type and intent of improvements at the time of acquisition. Assume acquisition including utility relocation occurs at the right of way certification milestone as shown in the Funding and Scheduling Section of the PSR. For further guidance see Chapter I, Caltrans, Right of Way Procedural Handbook.

	Current Value	Escalated Rate	Escalated Value
Acquisition, including Excess Lands, Damages and Goodwill	\$0		
Utility Relocation (State share)	\$22,500		
Clearance/Demolition	\$0		
RAP	\$0		
Title and Escrow Fees	\$0		
Condemnation Cost			
TOTAL RIGHT OF WAY:	\$22,500		
TOTAL ESCALATED VALUE :			

ROUND OFF TO :	\$23,000
-----------------------	-----------------

Estimate Prepared By : Jennifer McHa

Phone # (909) 383-6317

Date 7/15/2002



**PRELIMINARY
PROJECT COST ESTIMATE SUMMARY**

**08-SBd-18-KP 33.20 / 33.70
08-SBd-189-KP 0.00 / 0.50
EA 1A900K**

Type of Estimate : PSR
Program Code :
PIP Number : 2417

PROJECT DESCRIPTION : Stabilize Slope and Roadway

LIMITS : Near Rim Forest, In San Bernardino County
From Junction Route 18 and Route 189 to 0.5 Km East of Junction

PROPOSED IMPROVEMENTS : Reconstruct slopes, replace stacked rock wall, widen lane and shoulder widths on Route 189, and Construct Retaining wall on Route 18

Alternative : **Alternative 2**

ROADWAY ITEMS	\$	4,780,000
STRUCTURE ITEMS	\$	0
SUBTOTAL CONSTRUCTION	\$	4,780,000
RIGHT OF WAY	\$	23,000
TOTAL PROJECT COST	\$	4,803,000

Prepared By: Jennifer McHa **Date:** July 15, 2002

Check By Dat Wong **Date**

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

I. ROADWAY ITEMS

	QUANTITY	UNIT	UNIT PRICE	UNIT COST	SECTION COST
SECTION 1. Earthwork					
Roadway Excavation	1020	m^3	\$30	\$30,600	
Structural Excavation (Retaining wall)	1105	m^3	\$30	\$33,150	
Structure Excavation (Soil Nail Wall)	700	m^3	\$175	\$122,500	
Structural Backfill (Retaining wall)	2438	m^3	\$40	\$97,520	
Structural Backfill (Soil Nail Wall)	147	m^3	\$150	\$22,050	
Imported Material	3000	m^3	\$100	\$300,000	
Clearing & Grubbing	1	LS	\$20,000	\$20,000	
Develop Water Supply (5% -10% Roadway Excavation)	1	LS	\$3,060	\$3,060	
Total Earthwork Section					\$628,880
SECTION 2. Structural Section					
Asphalt Concrete Pavement	1800	tonne	\$70	\$126,000	
Aggregate Base	1500	m^3	\$40	\$60,000	
Aggregate Subbase	1800	m^3	\$30	\$54,000	
Total Structural Section					\$240,000
SECTION 3. Drainage					
Large Drainage Facilities	0	LS	\$0	\$0	
Storm Drains	0	LS	\$0	\$0	
Pumping Plants	0	LS	\$0	\$0	
Project Drainage (minor drainage modifications)	1	LS	\$70,000	\$70,000	
Total Drainage Section					\$70,000

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

	QUANTITY	UNIT	UNIT PRICE	UNIT COST	SECTION COST
SECTION 4. Specialty Items					
Environmental Mitigation Cost	1	LS	\$300,000	\$300,000	
Structure Concrete (Soil Nail Wall)	33	m^3	\$750	\$24,750	
Soil Nail Wall (facing)	235	m^2	\$500	\$117,500	
Soil Nail Assembly	100	m	\$100	\$10,000	
Minor Concrete (Minor Structures)	2,300	m^3	\$500	\$1,150,000	
Remove Concrete Retaining Wall	120	m^3	\$100	\$12,000	
Remove Stack Rock Wall	LS	LS	LS	\$10,000	
Remove Metal Beam Guardrail	200	LS	\$30	\$6,000	
Remove Base and Surfacing	1,000	m^2	\$35	\$35,000	
Remove Trees	20	EA	\$1,000	\$20,000	
Remove AC dikes	200	LS	\$20	\$4,000	
Place AC dikes	200	LS	\$30	\$6,000	
Concrete Barrier	106	m	\$150	\$15,900	
Construct Metal Beam Guardrail	200	LS	\$60	\$12,000	
Storm Water Pollution Plan (3% to 4% of Construction Cost)	1	LS	\$100,000	\$100,000	
Landscaping	1	LS	\$30,000	\$30,000	
Erosion Control	1	LS	\$10,000	\$10,000	
Temporary Easement	LS	LS	\$200,000	\$200,000	
			Total Specialty Items		\$2,063,150
SECTION 5. Traffic Items					
Construction Area Signs	1	LS	\$20,000	\$20,000	
Temporary Traffic Delineation	1	LS	\$30,000	\$30,000	
Traffic Control Systems	1	LS	\$70,000	\$70,000	
Traffic Management Plan	1	LS	\$100,000	\$100,000	
Striping	1,000	M	\$30	\$30,000	
			Total Traffic Items		\$250,000
			SUBTOTAL SECTIONS 1-6		\$3,262,030

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

					UNIT COST	SECTION COST
SECTION 6. Minor Items						
Subtotal Sections 1-5	\$3,252,030	x	0.05	\$162,602		
TOTAL MINOR ITEMS						\$162,602
SECTION 7. Roadway Mobilization						
Subtotal Sections 1-5	\$3,252,030					
Minor Items	\$162,602					
SUM	\$3,414,632	x	0.1	\$341,463		
TOTAL ROADWAY MOBILIZATION						\$341,463
SECTION 8. Roadway Additions						
Supplemental						
Subtotal Sections 1-5	\$3,252,030					
Minor Items	\$162,602					
SUM	\$3,414,632	x	0.05	\$170,732		
Contingencies						
Subtotal Sections 1-5	\$3,252,030					
Minor Items	\$162,602					
SUM	\$3,414,632	x	0.25	\$853,658		
TOTAL ROADWAY ADDITIONALS						\$1,024,389
TOTAL ROADWAY ITEMS						\$4,780,484
(Total of Sections 1-8)						
ROUND OFF TO :						\$4,780,000

Estimate Prepared By :

Jennier Mohia

Phone #

(800) 383-6317

Date

7/15/2002

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

II. STRUCTURES ITEMS

Bridge Name

Structure Type

Width in meters-out to out	0	0	0	0
Span Length in meters	0	0	0	0
Total Area in square meters	0	0	0	0
Footing Type (pile/spread)	---	---	---	---
Cost Per square meters	\$0	\$0	\$0	\$0
SUBTOTAL FOR STRUCTURE	\$0	\$0	\$0	\$0
Related Connectors	\$0	\$0	\$0	\$0
Railroad Related Cost	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0
10% Mobilization	\$0	\$0	\$0	\$0
25% Contingency	\$0	\$0	\$0	\$0
Remove old Bridge	\$0	\$0	\$0	\$0
TOTAL COST FOR STRUCTURE	\$0	\$0	\$0	\$0

PAGE SUBTOTAL - STRUCTURES ITEMS **\$0**

COMMENTS:

ROUND OFF TO : **\$0**

Estimate Prepared By : Jennifer McHa

Phone # (909) 383-6317

Date 7/15/2002

PRELIMINARY PROJECT COST ESTIMATE SUMMARY

III. RIGHT OF WAY

Right of Way estimates should consider the probable highest and best use and type and intent of improvements at the time of acquisition. Assume acquisition including utility relocation occurs at the right of way certification milestone as shown in the Funding and Scheduling Section of the PSR. For further guidance see Chapter I, Caltrans, Right of Way Procedural Handbook.

	Current Value
Acquisition, including Excess Lands, Damages and Goodwill	\$0
Utility Relocation (State share)	\$22,500
Clearance/Demolition	\$0
RAP	\$0
Title and Escrow Fees	\$0
Condemnation Cost	
TOTAL RIGHT OF WAY :	\$22,500
TOTAL ESCALATED VALUE :	

ROUND OFF TO :	\$23,000
-----------------------	-----------------

Estimate Prepared By : Jennifer McHale

Phone # (909) 383-6317

Date 7/15/2002

EXHIBIT D
RIGHT OF WAY DATA SHEET

To: MR.GARY WINTERGERST

Date: February 19, 2002
08-Riv-18-KP 33.47/33.55,
PM 20.8/20.85
08-SBd-189-KP 0.29/0.37
PM 0.18/0.23
EA 1A900K
Project Description: Reconstruct Slopes,
Stack Wall on Rte 189 & Extend Retaining
Wall on Rte 18

ATTENTION MR.OWEN SPENCER

From: Mohamed-Sami Abdelgwad
RW Planning and Management

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above-referenced project based on maps we received from you January 04, 2002, and the following assumptions and limiting conditions:

- [] 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.
- [] 2. The transportation facilities have not been sufficiently designed so that the estimator could determine the damages to any of the remainder parcels affected by the project.
- [] 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- [] 4. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 6 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 225), we will require a minimum of 4 months prior to the date of certification of the project. Either of these actions may reflect adversely on the District's other programs or our public image generally.

*TOTAL PROJECT HOURS FOR R/W: 100

NOTE: ALL WORK TO BE COMPLETED WITHIN THE EXISTING RIGHT OF WAY, IF THE SCOPE OF THE PROJECT CHANGES THEN A NEW RIGHT OF WAY DATA SHEET WILL BE REQUIRED.

Attachments:

- [XX] Right of Way Data Sheet
- [XX] Utility Information Sheet
- [XX] Railroad Information Sheet

To: MR.GARY WINTERGERST

ATTENTION MR.OWEN SPENCER

From: Mohamed-Sami Abdelgwad
R/W Planning and Management

Subject: Current Estimated Right of Way Costs

Date: February 19, 2002
08-Riv-18-KP 33.47/33.55,
PM 20.8/20.85
08-SBd-189-KP 0.29/0.37
PM 0.18/0.23
EA 1A900K
Project Description: Reconstruct Slopes,
Stack Wall on Rte 189 & Extend Retaining
Wall on Rte 18

We have completed an estimate of the right of way costs for the above-referenced project based on maps we received from you January 04, 2002, and the following assumptions and limiting conditions:

- ☐ 1. The mapping did not provide sufficient detail to determine the limits of the right of way required.
- ☐ 2. The transportation facilities have not been sufficiently designed so that the estimator could determine the damages to any of the remainder parcels affected by the project.
- ☐ 3. Additional right of way requirements are anticipated, but are not defined due to the preliminary nature of the early design requirements.
- ☐ 4. We have determined there are no right of way functional involvements in the proposed project at this time, as designed.

Right of Way Lead Time will require a minimum of 6 months after we begin receiving final right of way requirements (PYPSCAN node No. 224), necessary environmental clearance has been obtained, and freeway agreements have been approved. From the date of receipt of final right of way requirements (PYPSCAN node No. 225), we will require a minimum of 4 months prior to the date of certification of the project. Either of these actions may reflect adversely on the District's other programs or our public image generally.

*TOTAL PROJECT HOURS FOR RW: 100

NOTE: ALL WORK TO BE COMPLETED WITHIN THE EXISTING RIGHT OF WAY, IF THE SCOPE OF THE PROJECT CHANGES THEN A NEW RIGHT OF WAY DATA SHEET WILL BE REQUIRED.

Attachments:

- [XX] Right of Way Data Sheet
- [XX] Utility Information Sheet
- [XX] Railroad Information Sheet

To: MR.GARY WINTERGERST

ATTENTION MR.OWEN SPENCER

Date: February 19, 2002

08-Riv-18-KP 33.47/33.55,

PM 20.8/20.85

08-SBd-189-KP 0.29/0.37

PM 0.18/0.23

EA 1A900K

Project Description: Reconstruct Slopes,
Stack Wall on Rte 189 & Extend Retaining Wall
on Rte 18

From: Mohamed-Sami Abdelgwad

Subject: Right of Way Data

1. Right of Way Cost Estimate:

	Value
A. Acquisition, including Excess Lands Damages, Goodwill, Major Rehabilitation, and Environmental Permits to Enter	\$ 0.00
B. Acquisition of Offsite Mitigation. None Requested.	\$ 0.00
C. Utility Relocation (State share)	\$ 22,500.00
D. RAP	\$ 0.00
E. Clearance/Demolition	\$ 0.00
F. Title and Escrow Fees	\$ 0.00
G. Project Permit Fees	\$ 0.00
H. Condemnation Costs	\$ 0.00
I. Total R/W Estimate:	\$ <u>22,500.00</u>
J. Construction Contract Work	\$ 0.00

1a. Real Property Services:

A. Routine Maintenance (Object Code 058)	\$ 0.00
B. Advertising Costs (Object Code 039)	\$ 0.00
C. Utility Costs (Object Code 002)	\$ 0.00
D. Total Real Property Services Estimate:	\$ <u>0.00</u>

2. Anticipated Pypscan Date of Right of Way Certification December, 2002

3. Parcel Data:

Type	Dual/Appr	Utilities	RR Involvement	No
X _____	_____	U4-1 <u>1</u>	C&M Agrmt	<u>0</u>
A _____	_____	2 <u>2</u>	Svc Contract	<u>0</u>
B _____	_____	-3 _____	Lic/RE/Clauses	<u>0</u>
C _____	_____	-4 _____	Government Lands	<u>No</u>
D _____	_____	U5-7 <u>5</u>	Number of Parcels	<u>0</u>
E <u>XXXX</u>	_____	-8 _____	Misc. R/W Work	_____
F <u>XXXX</u>	_____	-9 <u>3</u>	RAP Displ	<u>0</u>
Total <u>0</u>			Clear/Demo	<u>0</u>
			Const Permits	<u>0</u>
			Condemnation	<u>0</u>
			Permits to Enter-ENV	_____

Areas: Right of Way: S.F. 0
Excess: S.F. 0
No. Excess Land Parcels: 0

M² 0
M² 0

4. Are there major items of construction contract work?
Yes ___ No X (If yes, explain.)
5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.). No Right of way required. X

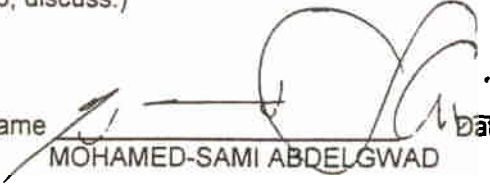
Type and Number of Parcels: Fee _____
Partial _____
Full _____
Easements _____
Temporary _____
Permanent _____

6. Is there an effect on assessed valuation?
Yes ___ Not Significant ___ No X (If yes, explain.)
7. Are utility facilities or rights of way affected? Yes X No ___
(If yes, attach Utility Information Sheet, Exhibit 4-EX-5.)
8. Are railroad facilities or rights of way affected? Yes ___ No X
(If yes, attach Railroad Information Sheet, Exhibit 4-EX-6.)
9. Were any previously unidentified sites with hazardous waste and/or material found? Yes ___ None Evident X (If yes, attach memorandum per Procedural Handbook Chapter 4, Section 4.01.10.00.)
10. Are RAP displacements required? Yes ___ No X (If yes, provide the following information.)
No. of single family _____ No. of business/nonprofit _____
No. of multi-family _____ No. of farms _____
- Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.
11. Are there material borrow and/or disposal sites required?
Yes ___ No X (If yes, explain.) **None Requested.**
12. Are there potential relinquishments and/or abandonments?
Yes ___ No X (If yes, explain.)
13. Are there existing and/or potential Airspace sites?
Yes ___ No X (If yes, explain.)
14. Indicate the anticipated Right of Way schedule and lead time requirements.
(Discuss if District proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

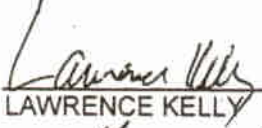
PYPSCAN lead time (from Maps to R/W to project certification) 6 months.

15. Is it anticipated that all Right of Way work will be performed by CALTRANS staff?
Yes X No (If no, discuss.)

Evaluations prepared by:

Right of Way: Name  Date February 19, 2002
MOHAMED-SAMI ABDELGWAD

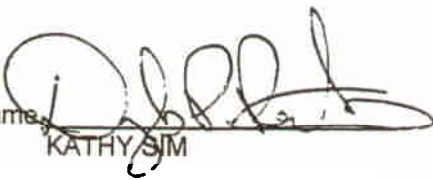
Railroad: Name  Date February 19, 2002
BETTY BOBOSIK

Utilities: Name  Date February 19, 2002
LAWRENCE KELLY


Government Lands: Name  Date February 19, 2002
ANTHONY RIZZI

Property Management: Name  Date February 19, 2002
TERRENCE K. MOORE

Reviewed By:

Project Coordinator Name  Date February 19, 2002
KATHY SIM

Recommended for approval by:


MOHAMED-SAMI ABDELGWAD
Right of Way Agent
Planning and Management
San Bernardino Office
Southern Right of Way Region

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.


GEORGE J. PINK JR
Right of Way Project Delivery Manager
San Bernardino Office
Southern Right of Way Region

Date 2/25/02

cc: Program Manager
Project Manager

This utility estimate was prepared using "project specific" data and unit values. This information is not to be utilized for the updating or preparation of this, or any other Right of Way Cost Report or Utility Information Sheet.

08-Riv-18-KP 33.47/33.55,
PM 20.8/20.85
08-SBd-189-KP 0.29/0.37
PM 0.18/0.23
EA 1A900K

UTILITY INFORMATION SHEET

1. Name of utility companies involved in project:

Southern California Edison Company
Verizon
Crestline Sanitation District
Falcon Cable Systems

Southern California Gas Company
Crestline Lake Arrowhead Water
Crestline Village Water District
Lake Arrowhead Community Service District

2. Types of facilities and agreements required:

Southern California Edison Company-Overhead Electric
Southern California Gas Company-Underground Gas
Verizon-Overhead Phone Lines
Crestline Lake Arrowhead Water-Underground Water
Crestline Sanitation District-Sewer
Crestline Village Water District-Underground Water
Falcon Cable Systems-Overhead Cable
Lake Arrowhead Community Services District-Sewer

3. Additional information concerning utility involvement on this project. Is there any special circumstances/facilities requiring additional lead time?

This project proposes to reconstruct slopes, stack rock, construct a crib wall, and install metal beam guard rails on State Route 189 and extend the retaining wall on the north side of State Route 18 highway to stabilize the eroded slope. Depending on their exact location 2 or 3 power poles will be relocated. These poles also have phone and cable TV lines on them. Should the scope of the project change to include any further excavation potholing or relocations may become necessary.

Estimate to relocate 3 power poles @ \$15,000.00 per pole = \$45,000.00
State Liability (50%) = \$22,500.00

4. Potholing costs: Phase 1 funding:

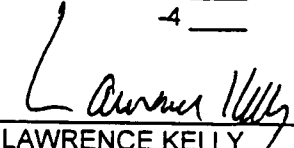
None.

5. PMCS Input Information

Total estimated cost of State's obligation for utility relocation on this project:
(Phase 9 funding) \$ 22,500.00

Utility Involvement	
U4-1	<u>1</u>
-2	<u>2</u>
-3	<u>3</u>
-4	<u>4</u>
U5-7	<u>5</u>
-8	<u>8</u>
-9	<u>3</u>

Prepared By:


LAWRENCE KELLY
Right of Way Utility Estimator

Date January 31, 2002

08-Riv-18-KP 33.47/33.55,
PM 20.8/20.85
08-SBd-189-KP 0.29/0.37
PM 0.18/0.23
EA 1A900K

PROPERTY MANAGEMENT/EXCESS LAND INFORMATIONAL SHEET

<u>WBS CODE</u>	<u>WBS ACTIVITY</u>	<u>NUMBER OF PARCELS</u>	<u>HOURS</u>	<u>COST</u>
	<u>PROPERTY MANAGEMENT</u>		<u>NOT APPLICABLE</u>	<u>X</u>
195.40.05	Fair Market Rent Determinations (Residential)	_____	_____	_____
195.40.10	Fair Market Rent Determinations (Non-Residential)	_____	_____	_____
195.40.15	Regular Rental Property Management Historic House	_____	_____	_____
195.40.20	Property Maintenance and Rehabilitation (Rental Property) Historic House	_____	_____	_____
195.40.25	Property Maintenance and Rehabilitation (Non-Rental Property)	_____	_____	_____
195.40.30	Hazardous Waste and Hazardous Materials	_____	_____	_____
195.40.35	Transfer of Property to Clearance Status	_____	_____	_____
270.25.03	Secure Lease for Resident Engineer's Office Space or Trailer	_____	_____	_____
	Subtotal	_____	_____	_____
	<u>EXCESS LAND</u>		<u>NOT APPLICABLE</u>	<u>X</u>
195.45.05	Excess Land Inventory	_____	_____	_____
195.45.10	Excess Land Appraisal and Public Sale Estimate	_____	_____	_____
195.45.15	Excess land Inventory ("Roberti Bill)	_____	_____	_____
195.45.20	Excess Land Sales to \$15,000	_____	_____	_____
195.45.25	Excess Land Sales from \$15,001 to \$500,000	_____	_____	_____
195.45.30	Excess Land Sales over \$500,000	_____	_____	_____
195.45.35	CTC and AAC Coordination	_____	_____	_____
	Subtotal	_____	_____	_____
	TOTAL HOURS (ONLY)	_____	_____	_____


TERRENCE K. MOORE
Property Management
Excess Lands

Date: February 19, 2002

08-Riv-18-KP 33.47/33.55,
PM 20.8/20.85
08-SBd-189-KP 0.29/0.37
PM 0.18/0.23
EA 1A900K

RAILROAD AND GOVERNMENT LANDS INFORMATION SHEET

1. Describe railroad facilities or rights of way affected.

None.

2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail service? Yes ___ No X (If yes, explain.)

3. Discuss types of agreements and rights required from the railroads. Are grade crossings requiring service contracts, or grade separations requiring construction and maintenance agreements involved?

None.

4. Remarks (non-operating railroad right of way involved?):

5. Is Government Lands involved? Yes ___ No X

If yes, number of parcels ___
Agency Name and Explanation:

6. PMCS Input Information

RR Involvement	<u>No</u>
C&M Agreement	<u>0</u>
SVC Contract	<u>0</u>
LIC/RE/Clauses	<u>0</u>
Government Lands	<u>No</u>
Number parcels	<u>0</u>

Prepared By: Betty Bobosik
BETTY BOBOSIK
Right of Way Railroad Coordinator

Date: February 19, 2002

Prepared By: Anthony Rizzi
ANTHONY RIZZI
Right of Way Government Lands Coordinator

Date: February 19, 2002

EXHIBIT E
PRELIMINARY ENVIRONMENTAL
ANALYSIS REPORT



Preliminary Environmental Analysis Report

Project Information

District 08 County Sbd Route 18 & 189

Kilometer Post (Post Mile) 33.47/33.55 (20.80/20.85) & 0.00/0.37 (0.00/0.23) EA 1A900K

Project Title: Reconstruct slopes and stack wall, and widen lane and shoulder widths on Rte 189; and extend retaining wall on Rte 18

Project Manager Gary Wintergerst Phone # 383 - 6334

Project Engineer Dat Wong Phone # 383 - 1062

Environmental Project Manager Ryan Roberts Phone # 383 - 1595

Environmental Planner Generalist: Jason Walsh Phone # 383 - 7555

Project Description

Purpose and Need: The existing stacked rock wall located along the edge of travel way on SR 189 has been deteriorating over time. The proposed reconstruction of this wall will help prevent rocks from falling apart and onto the roadway. As part of this project, the existing lane and shoulder widths on SR 189 will be widened to meet current design standards.

The existing concrete retaining wall on the north side of SR 18 will also be extended as necessary to prevent failure of the existing slope between SR 189 and SR 18. Slope erosion is causing the loss of lateral support to SR 189. Extending retaining walls and providing soil retention methods will prevent the continuous erosion of the slope.

Description of work: The proposed project will reconstruct slopes, and replace existing stacked rock wall on SR 189, restore poorly supported metal beam guardrail, and widen existing lane and shoulder widths to the current standards within the project limits. The proposed project will also extend an existing concrete retaining wall on the north side of SR 18 to stabilize the eroded slope between SR 189 and SR 18.

Alternatives:

Alternative 1 – Lower the existing pavement surface of SR 189 five (5) meters from the original ground, and widen the existing pavement width to include two 3.6-meter wide lanes and two 2.4-meter shoulders for a total width of 12 meters. Reconstruct the existing stacked rock wall and existing metal beam guardrail on SR 189, and extend existing Type 1 retaining wall on SR 18.

The preliminary estimated cost for alternative 1 is \$2,783,000.

Alternative 2 – Reconstruct existing stacked rock wall and metal beam guardrail, construct new retaining wall, and widen existing pavement width of SR189 to include two 3.6-meter wide lanes and two 2.4 meters shoulders for a total width of 12 meters. Remove existing Type 1 and sack concrete walls between Route 189 and Route 18, and construct a mechanically stabilized embankment (MSE) wall or higher Type 1 wall.

The preliminary estimated cost for alternative 2 is \$3,391,000.

Alternative 3 – No build.

Anticipated Environmental Approval

<u>CEQA</u>	<u>NEPA</u>
<input type="checkbox"/> Categorical/Statutory Exemption	<input type="checkbox"/> Categorical Exclusion
<input checked="" type="checkbox"/> Negative Declaration / focused ND	<input checked="" type="checkbox"/> Finding of No Significant Impact
<input type="checkbox"/> Environmental Impact Report	<input type="checkbox"/> Environmental Impact Statement

The anticipated environmental document for the proposed project is an Initial Study/Environmental Assessment. It is estimated that the environmental document will require 20 months to complete.

PSR Summary Statement

An Initial Study/Environmental Assessment (IS/EA) will be required in compliance with Division 13, Public Resources Code (State), and 42 U.S.C. 4332(2) (C) (Federal). A Mitigated Negative Declaration and Finding of No Significant Impact (ND/FONSI) is anticipated.

Environmental issues on this project include but are not limited to those in the following table:

Resource	Study Area / Impact
Southern Rubber Boa	Project limits of construction
National Register of Historical Places	SR-18 is eligible for listing as a district.
Visual Resources	Removal of vegetation, and new construction will require visual assessment.
Community Impact Study	Required due to potential closure of road

Permits from the following agencies are anticipated:

- State Water Resources Control Board (NPDES)

Total costs to mitigate environmental impacts and meet permit requirements are estimated at \$235,000.

Special Considerations

Vegetation removed from any properties found to be historically significant may become a sensitive issue.

Anticipated Project Mitigation

For this project, mitigation could include exclusion fencing for Southern Rubber Boa, habitat replacement, and visual effects. The estimated mitigation cost for this project is \$235,000.

Disclaimer

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Study Report. Changes in project scope, alternatives, or environmental laws will require a re-evaluation of this report.

Reviewed by:



Environmental Branch Chief

Date: 5/3/02



Project Manager

Date: 5/6/02

Environmental Technical Reports or Studies Required

	Study	Document	N/A
Community Impact Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farmland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Section 4(f) Evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Visual Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floodplain Evaluation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Air Quality Study	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Paleontology	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cumulative Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cultural			
ASR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HSR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HASR	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HPSR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Section 106 / SHPO	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Native American Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other			
Finding of Effect _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Data Recovery Plan _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous Waste			
ISA (Additional)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PSI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Biological			
Endangered Species (Federal)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Endangered Species (State)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Species of Concern (CNPS, USFS, BLM, S, F)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biological Assessment (USFWS, NMFS, State)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetlands	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Natural Environment Study	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NEPA 404 Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Permits			
401 Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
404 Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1601 Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
City/County Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State Coastal Permit Coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Technical Review

The following comments apply to proposed alternatives 1 and 2:

Socio-economic and Community Effects: A Community Impact Analysis may be required to address how the proposed closure and/or detours on SR-189 during road construction will affect the surrounding communities, citizens and businesses.

Farmlands: No farmlands are located within the project limits.

4(f) Impacts: No 4(f) impacts are anticipated at this time.

Visual Effects: A visual assessment will be required and should include potential project effects and any appropriate mitigation. Design of the upgraded guardrail, widened shoulder and extended retaining wall may require and include visual impact mitigation. Tree removal must be minimized to abate the effect on the visual setting. Vegetation removed from any properties found to be historically significant may become a sensitive issue.

Water Quality and Erosion: The site should be evaluated for potential water quality impact because of erosion problem at the site.

Floodplain: A floodplain evaluation report summary may be required.

Noise Study: No residences are adjacent to the project. It is anticipated that a noise study will not be required.

Air Quality Impact: This project will not create any significant air quality impact.

Wild and Scenic River: Based on scoping level review, there are no currently designated or candidate Wild and Scenic rivers that are adjacent to or would be impacted by the project. Further consultation with the United States Forest Service (USFS) may be required.

Cultural Resources: SR-18 (PM 17.9/21.7) has been determined eligible for listing as a district on the National Register of Historic Places (SHPO concurrence 10/5/01). However, the retaining wall (PM 20.80/20.85) in the project area of SR-18 is a non-contributor to the district. Also, this segment of SR-18 is an eligible California Scenic Highway (listed 1963), a San Bernardino County Scenic Road (1980) and a National Forest Scenic Byway (1990). The SR-189 project segment is part of the original 1915 alignment of the Rim of the World Highway. A recent records search, which includes both SR-18 and SR-189 highway segments was conducted for another project. The project area is located within the San Bernardino National Forest. An archaeological survey may be required for the project. The Area of Potential Effects must include all access roads, work areas and staging areas beyond the existing paved highway. A historic survey of resources related to the project may be required. Any subsequent changes in project scope may require additional archaeological or historical review.

Paleontology: Paleontological resources are unlikely to occur on this project.

Native American Coordination: No coordination is anticipated at this time.

Hazardous Waste/Materials: An Initial Site Assessment (ISA) will be required to address the potential for hazardous waste. The photographs of project site shows that there is no hazardous material at the vicinity of the project.

Biological Resources: The project is located in the range of Southern Rubber Boa, which is a state-listed threatened species. The habitat will require assessment and the construction areas may require pre-construction surveys and fencing to exclude Southern Rubber Boa.

Wetlands: No identifiable wetlands are located within the project limits.

Invasive Pest Plant Species: Executive Order 13112 requires that any federal action may not cause or promote the spread or introduction of invasive species. If Spanish Broom plant species is present in the project area, removal may be required.

Right-of-Way Relocation or Staging Area. No new right-of-way is indicated for this project. Material sites, disposal sites and construction staging must be identified prior to initiating environmental studies, and will require complete environmental evaluation as part of this project.

Mitigation: If the biological assessment determines the project to be potential Southern Rubber Boa habitat, then a preconstruction survey and exclusion fencing, as well as restoration of disturbed habitat, will be required. Visual impact mitigation may be required in the form of specialized landscaping for walls or replacement of disturbed vegetation. Reasonable mitigation costs for both biological and visual impacts are generally considered to be up to 3% of the project cost.

Non-mitigation requirements would include providing a Storm Water Pollution Prevention Plan (SWPPP)/Water Pollution Control Plan (WPCP) as required by the NPDES Permit. Typical preparation costs for SWPPP/WPCP plans range between \$2,000 to \$10,000. Implementing construction Best Management Practices (BMPs) as part of the SWPPP/WPCP will cost approximately 1% of the total construction cost.

No other mitigation costs are currently anticipated. In addition to the estimated mitigation amounts, the project will require the removal of vegetation along SR-189, which is likely to necessitate re-planting. All mitigation costs are summarized by type at the end of this PEAR on the Mitigation and Compliance Cost Estimate (Attachment A).

Permits: State Water Resources Control Board (NPDES) coordination will be required.

List of Preparers

Hazardous Waste Review By: Tony Louka, Env. Engineering	Date Feb 5, 2002
Biological Review By: Kelly Cohen, Biological Studies	Date Feb 27, 2002
Cultural Review By: Christie Hammond, Cultural Studies Branch	Date Feb 11, 2002
Visual Resources Review By: Byron Strout, Landscape Architecture Branch	Date Feb 4, 2002
Generalist Review By: Paul Melocoton, Env. Studies Branch A	Date Feb 27, 2002

Attachment A

PEAR Mitigation and Compliance Cost Estimate

PEAR Mitigation and Compliance Cost Estimate

ALTERNATIVE NO. 1

Dist.-Co.-Rte.-PM: 08-Sbd-18- 20.80/20.85 & 08-Sbd-189-PM 0.00/0.23

EA: 1A900K

Project Description: Lower the existing pavement surface of SR 189 five (5) meters from the original ground, and widen the existing pavement width to include two 3.6-meter wide lanes and two 2.4-meter shoulders for a total width of 12 meters. Reconstruct the existing stack rock wall and existing metal beam guardrail on SR 189, and extend existing Type 1 retaining wall on SR 18.

Person completing form/Dist. Branch.: Ryan M Roberts/Environmental Project Management

Project Manager: Gary Wintergerst Phone number: (909) 383-6334

Date: 4-30-02

	Mitigation			Compliance
	Project Feature ¹	Enviro. Obligation ²	Statutory Require. ³	Permit & Agreement ⁴
Fish & Game 1601 Agreement				
Coastal Development Permit				
State Lands Agreement				
NPDES Permit				30
COE 404 Permit- Nationwide				
COE 404 Permit- Individual				
COE Section 10 Permit				
COE Section 9 Permit				
Other:				
Noise attenuation				
Special landscaping	83.5			
Archaeological				
Biological		83.5		
Historical				
Scenic resources				
Wetland/riparian				
Other:				
TOTAL (Enter zeros if no cost)	83.5	83.5	0	30

- Costs are to be reported in \$1,000's.
- Costs are to include all costs to complete the commitment including: capital outlay and staff support; cost of right-of-way or easements; long-term monitoring and reporting, and; any follow-up maintenance.

¹ Mitigation Caltrans would normally do if not required by a permit or environmental agreement.

² Mitigation Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

³ Mitigation Caltrans would not normally do and is not required by a permit or Enviro. agreement but is required by a law.

⁴ Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

*Prepare a separate form for each practicable alternative in the PSR.

PEAR Mitigation and Compliance Cost Estimate

ALTERNATIVE NO. 2

Dist.-Co.-Rte.-PM: 08-Sbd-18- 20.80/20.85 & 08-Sbd-189-PM 0.00/0.23

EA: 1A900K

Project Description: Reconstruct existing rock wall and metal beam gaurdrailing, construct new retaining wall, and widen existing pavement width of SR189 to include two 3.6-meter wide lanes and two to 2.4 meters shoulders for a total width of 12 meters. Remove existing Type 1 and sack concrete walls between Route 189 and Route 18, and construct a mechanically stabilized embankment (MSE) wall or higher Type 1 wall.

Person completing form/Dist. Branch.: Ryan M Roberts/Environmental Project Management

Project Manager: Gary Wintergerst Phone number: (909) 383-6334

Date: 4-30-02

	Mitigation			Compliance
	Project Feature ¹	Enviro. Obligation ²	Statutory Require. ³	Permit & Agreement ⁴
Fish & Game 1601 Agreement				
Coastal Development Permit				
State Lands Agreement				
NPDES Permit				35
COE 404 Permit- Nationwide				
COE 404 Permit- Individual				
COE Section 10 Permit				
COE Section 9 Permit				
Other:				
Noise attenuation				
Special landscaping	100			
Archaeological				
Biological		100		
Historical				
Scenic resources				
Wetland/riparian				
Other:				
TOTAL (Enter zeros if no cost)	100	100	0	35

- Costs are to be reported in \$1,000's.
- Costs are to include all costs to complete the commitment including: capital outlay and staff support; cost of right-of-way or easements; long-term monitoring and reporting, and; any follow-up maintenance.

¹ Mitigation Caltrans would normally do if not required by a permit or environmental agreement.

² Mitigation Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

³ Mitigation Caltrans would not normally do and is not required by a permit or Enviro. agreement but is required by a law.

⁴ Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

*Prepare a separate form for each practicable alternative in the PSR.

Attachment B

Resources by WBS Code

RESOURCES BY WBS CODE

[illegible]

RESOURCES BY WBS CODE

WBS Activity	EA:	Env Proj Mgmt Unit 170	Generalist Unit 169	Biologist Unit 168	Cultural Unit 178	Landscape Unit 340	Noise/Air Unit 332	Water Quality Unit 332	Haz Waste Unit 332	Socio-Econ Specialist	Total Hours	Cumm. Sub Totals	Cumm. PY's
40.15.10	Prepare & File Notice of Determination (NOD) - CEQA										0		
15	OBTAIN PERMITS, AGREEMENTS & ROUTE ADOPTIONS	0	0	200	0	0	0	0	0	0	200	4160	2.4
15.05	Determine Required Permits			40							40		
15.10	Obtain Permits										0		
15.10.05	Obtain U.S. COE Permit (404)										0		
15.10.10	Obtain U.S. Forest Service Permit			80							80		
15.10.15	Obtain U.S. Coast Guard Permit										0		
15.10.20	Obtain DFG Permit (1601/1603)										0		
15.10.25	Obtain Coastal Development Permit										0		
15.10.30	Obtain Conditional Use Permit (Local Agency)										0		
15.10.35	Obtain Grading Permit (Local Agency)										0		
15.10.40	Obtain Waste Discharge Permit (NPDES)			80							80		
15.10.45	Obtain USFWS Approval										0		
15.10.50	Obtain Regional Water Quality Control Board Permit (401)										0		
15.35.05	Prepare and Execute Cooperative Agreement for Environmental										0		
15	MITIGATE ENVIRONMENTAL IMPACTS & CLEAN-UP HAZARDOUS WASTE	0	80	80	0	0	0	0	0	0	160	4320	2.4
15.05	Perform Environmental Mitigation										0		
15.05.05	Perform Historical Structures Mitigation										0		
15.05.10	Recover Archaeological Data										0		
15.05.15	Perform Biological Mitigation			80							80		
15.05.20	Perform Environmental Mitigation R/W Work		80								80		
15.10	Perform Detailed Site Investigation for Hazardous Waste										0		
15.10.05	Obtain Right of Permit for Hazardous Waste Site Investigations										0		
15.10.10	Perform Surveys to Locate Hazardous Waste Sites										0		
15.10.15	Conduct Detailed Investigation										0		
15.15	Develop Hazardous Waste Management Plan										0		
15.20	Prepare Hazardous Waste PS&E										0		
15.25	Perform Hazardous Waste Clean-Up										0		
15.25.05	Prepare Hazardous Waste Clean-Up Task Orders										0		
15.30	Certify Freedom of Hazardous Waste										0		
15.35	Perform Long Term Mitigation Monitoring										0		
5	CIRCULATE, REVIEW & PREPARE FINAL DISTRICT PS&E PACKAGE	0	40	80	80	0	40	40	40	0	320	4640	2.6
5.15	Perform Environmental Re-evaluation		40	80	80		40	40	40		320		
0	PERFORM CONSTRUCTION ENGINEERING & GENERAL CONTRACT ADMIN.	0	0	160	160	0	0	0	0	0	320	4960	2.8
0.05	Prepare Resident Engineer's File										0		
0.20.05	Technical Support			80	80						160		
0.50	Prepare Cert. Of Compliance with Environmental Mitigation Requirements			80	80						160		
5	PREPARE AND ADMINISTER CONTRACT CHANGE ORDERS	0	0	80	80	0	0	0	0	0	160	5120	2.9
5.10	Provide Functional Support			40	40						80		
5.10.95	Provide "Other" Functional Support			40	40						80		
Total Hours and PY's		800	1640	1000	920	200	160	160	240	0	5120	5120	2.9

Attachment C
Environmental Schedule

EXHIBIT F
THREE-YEAR-ACCIDENT DATA

L O C A T I O N D E S C R I P T I O N						RA GRP (RUS)	*-NUMBER OF ACCIDENTS/SIGNIFICANCE*			PER KLD INJ		*ADT * MAIN X-ST	TOTAL MV+ OR MVM	*-ACCIDENT RATE ACTUAL			ACCS/MV+ OR MVM- AVERAGE			
						TOT	FAT	INJ	F+I	VEH	WET	DARK			FAT	F+I	TOT	FAT	F+I	TOT
189	SBD	0.010	THRU SBD	000.310		H07	13	0	2	2	7	3	3	0						
08-0001	0.301M	99-01-01	01-12-31	36 MO	(S)	H99					H99			2	3.4	1.12	.000	1.79	11.65	.012 1.14 2.95

EXHIBIT G
INITIAL SITE ASSESSMENT (ISA)

INITIAL SITE ASSESSMENT (ISA) CHECKLIST

DATE: JUNE 20, 2002

PROJECT INFORMATION

District 8

County Sierra

Route

18/189

KiloPost (PM)

33.47/33.55; 0.4/0.37

E.A.

1A900K

Scope of Project

Reconstruct slopes, rock wall; widen lane + shlbk.

Project Engineer

OWEN SPENCER

Telephone

6223

Environmental Coordinator

W. GLEASON

Telephone

5918

DATE ISA NEEDED

Attach the project location map and an aerial photo to this checklist to show the location of proposed R/W and all known and/or potential hazardous waste sites.

- Project Features: New R/W? ☐ Excavation? ☐ Railroad Involvement? ☐
Structure Demolition/Modification? ☐ Subsurface Utility Relocation? ☐
- Project Setting: Rural ☐ Urban ☒
Current Land Uses: _____
Adjacent Land Uses: _____

(Industrial light industry, commercial, agriculture, residential, other)

- Check Federal, State and local environmental and health regulatory agency records as necessary to see if any known hazardous waste sites in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets as needed to provide all information available pertinent to the proposed project. IS PROJECT AFFECTING SITES LISTED ON CORTESE LIST? NO ☒ YES ☐ IF YES, DESCRIBE SITE: _____

4. Conduct Field Inspection

Date

Storage Structures/Pipelines:	Contamination: (spills, leaks, illegal dumping, etc)	Hazardous Materials: (asbestos, lead, etc.)
USTs _____	Surface Staining _____	Buildings _____
Surface tanks _____	Oil Sheen _____	Sprayed-on _____
Sumps _____ Ponds _____	Odors _____	Fireproofing _____
Drums _____ Basins _____	Vegetation damage _____	Pipe Wrap _____
Transformers _____	Other _____	Friable Tile _____
Landfill _____		Acoustical _____
Other _____		Plaster _____
		Serpentine _____
		Paint _____ Other _____

5. Other comments and/or observations.

NO ADL concerns on these Routes.

ISA DETERMINATION:

Does the project have potential hazardous waste involvement? NO

If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Preliminary Site Investigation? If yes, explain, and give estimate of additional time required:

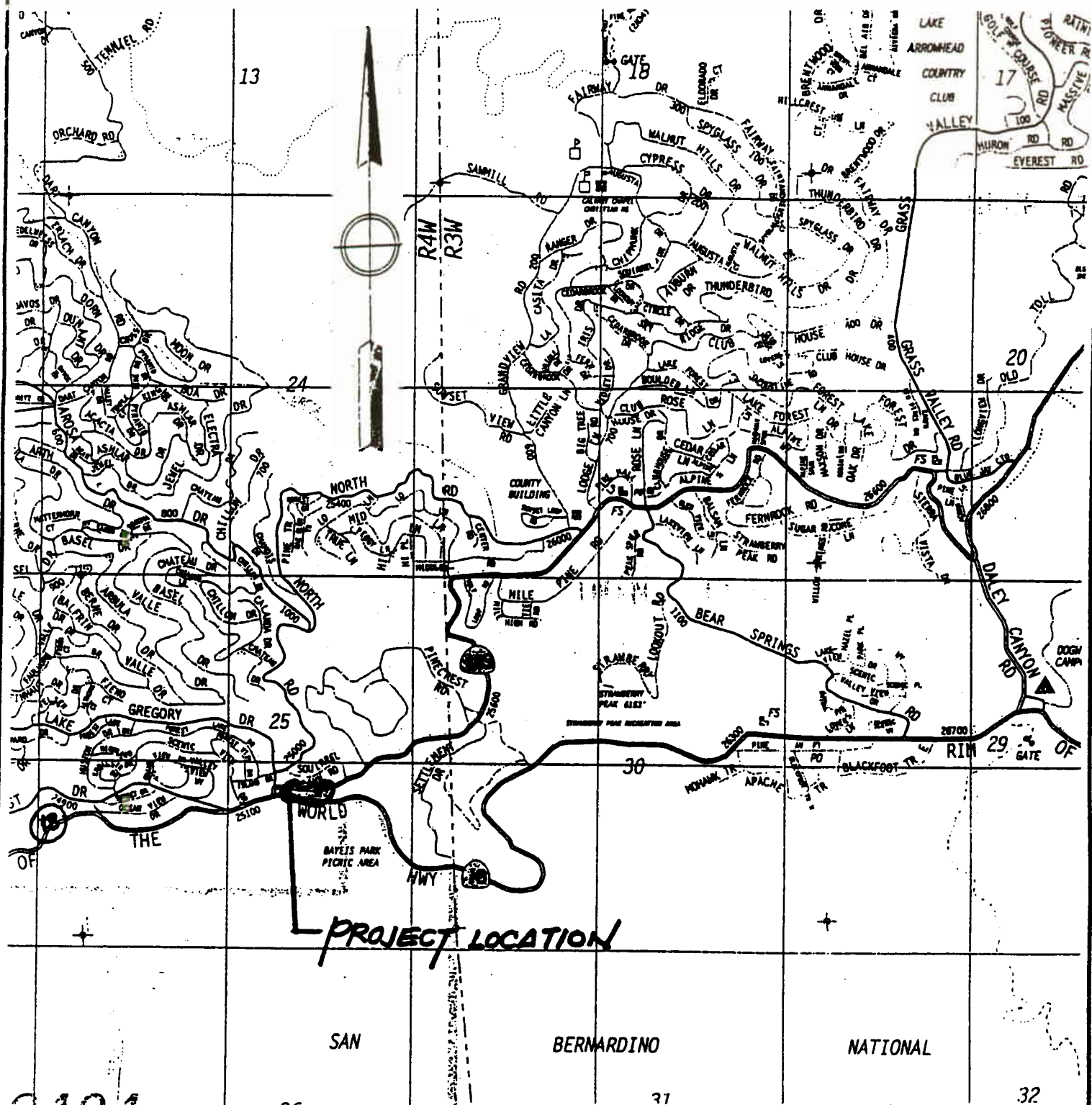
ISA CONDUCTED BY

C. Pasaro RA

DATE:

6/28/02

EXHIBIT H
PROJECT INITIATION PROPOSALS



LOCATION MAP

SBD-18-20.80/20.85 (KP 33.47/33.55)

SBD-189-0.18/0.23 (KP 0.29/0.37)

In Rimforest

PROJECT INITIATION PROPOSAL (PIP)
CAPITAL OUTLAY

DATE REC IN PROG MGMT Jul 8 2 2001 E.A. 1A900G
Created in PMCS by: M. Choate
Created in File Maker Pro by: _____

PIP NUMBER 2417
Date: 8-6-01
Date: _____

A. LOCATION: SBD-18-20.80/20.85 & SBD-189-0.18/0.23
Co-Rte-PM

Approximate 0.18 Miles East of Jct Rte 18

In Rimforest

Originating Branch Maintenance Engineering
Contact Person Nhan (x4219)/Larry (x6299)

Date 6/27/01

Geographic

Branch Chief Basem Muallem

Telephone Ext. 4278

PROBLEM:

The existing stack rock on westbound of SR-189 is deteriorating.

The existing metal beam guardrail on eastbound of SR-189 is erosion of 1/2 to 1 slope that parallels SR-18 from approximate PM 20.80 to 20.85. The existing lane width on SR-189 at this location

See attached photos for more details.

SOLUTION(S): needs to be widened.

It is proposed to reconstruct existing stack rock on west bound of SR-189; construct reinforced concrete cribwall and new metal beam guard rail on the south side of SR-189 to accommodate the current standard lane and shoulder width. Also, Extend existing concrete retaining wall on north side of SR-18 at approximately 250 feet to the east to stabilize the eroding slope. See attached "MEETING MINUTES" dated June 6, 2001 for more information.

Total Project Cost	(Con + R/W + Eng):	\$1,324,000		
Const: Roadwork	\$1,038,000	Structures	\$0	
Const: Total Cost	\$1,038,000	State Share	\$1,032,000	Local Share N/A
R/W: Acquisition	\$5,000	Utilities	\$60,000	
R/W: Total Cost	\$65,000	State Share	\$65,000	Local Share N/A
ENGR: Total Cost	\$221,000	State Share	\$218,000	Local Share N/A

B. PROGRAM MANAGEMENT:

Pgm HA42 Elem RAS Fund Source: FED: X
Project Manager: G. Wintergerst STA: _____
Functional Manager: _____ LOC: _____
Project Engineer: _____

Major: X
Shopp X Stip _____ Loc/Meas _____
Minor: _____ FY: PND
Needs Coop Agree: Yes _____ No X

Comments:

If approved, project will be eligible for SHOPP funds. OK for review. MC
Project requires a programming document. JT.

Date: 7-2-01

C. REVIEWER COMMENTS:

Request Staff Review

See attached comments. Cost estimate will be further developed at the PSSR stage. There is a possibility of closing and detouring during construction.

A functional manager needs to be assigned.

Reviewer

M. Choate

Date: 7-31-01

D. FINAL DISPOSITION:

Project Approved: X as submitted

with conditions or revisions indicated

Project Rejected: _____

COMMENTS:

MEETING MINUTES

MEETING DATE: June 6, 2001

TIME: 1:00 – 3:30 P.M.

PLACE: Room 1120, Caltrans District 8

RECORD DATE: June 6, 2001

RECORDED BY: Nhan Nguyen

SUBJECT: Reconstruction of slopes, MBGR, lane width and rock stackwall on SR-189

ATTENDEES:

Nhan Nguyen (Mtce)	Ext 4219
Larry Heasley (Mtce)	Ext 6299
Edward Prescott (Mtce)	867-2102
Dennis Meisenbach (Mtce)	337-3181
Bill Kern (Mtce)	337-3181
Christie Hammond (Env. Cultural Studies)	Ext 6933
Kelly Cohen (Biology)	Ext 6311
Dave Cooper (Prog Mgt)	Ext 4580
Garry Wintergerst (Proj Mgmt)	Ext 6334
George Morhig (Proj Mgmt)	Ext 7165
Joe Crump (Right of Way)	Ext 4737
Iwan Risman (Hwy Ops)	Ext 4084
Najib Challita (Hwy Ops)	Ext 5943

The items presented below summarize the substantive items discussed or issues resolved at the meeting to the best of writer's memory. If the recipients understand differently please notify the writer as soon as possible 383-4219

A meeting was held at district office to discuss the safety, operations and maintenance issues from PM 0.18 to 0.23 of SR-189 and from PM 20.80 to 20.85 of SR-18. The following items were the results of the meeting:

1. Maintenance Unit is responsible to issue PIP for District review and approval.
2. The PIP will be submitted as a major project for funding purposes. When the PIP is approved, the Project Report will breakdown the work into different phases and each phase will be funded separately and treated as a minor project in order to accelerate the project.
3. If widening SR-189 is required in order to upgrade the existing roadway to standard, it was suggested to widen the southside of SR-189 (between SR-189 and SR18) due to the reasons that this land belongs to US Forest and R/W acquisition may not be required. Also, If it is required to construct a retaining wall to replace the existing rock stackwall on the northside, a temporary easement will be required.
4. Cost estimate is needs to be revised to include an additional of \$60,000 for the relocation of utility poles and \$5,000 for R/W easement.

5. The type of wall such as crib wall, reinforced concrete retaining wall or other feasible type walls, will be determined during the preparation of Project Report after the PIP is approved.
6. The existing roadway on SR-189 is currently ^{in need of widening.} Proposed standard width for mountainous area for SR-189 will be addressed in the Project Report.
7. Local Maintenance office will be monitoring the rock stackwall on westbound SR-189 at PM 0.23. If the rock falls apart onto SR-189, maintenance crew will be responsible for cleaning.
8. Local Maintenance office will also continue to monitor the movement as well as the roadway condition of SR-189 from PM 0.18/0.23 and SR-18 PM 20.80/20.85. If for some reasons the roadway/bed is noticed to be unstable, an emergency contract will be issued if it's warranted.
9. Environmental/Cultural Studies Unit may prepare the study of this project in conjunction with the project EA 0A730G (Rock Pillars) which may help to accelerate this project.
10. Environmental/Cultural Studies Unit will verify the historical of the rock stackwall on westbound SR-189 at PM 0.23 prior to any work such as removal or other work related to the stack wall.

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

MEETING ATTENDANCE RECORD

SUBJECT OF MEETING: Safety, Operations and Maintenance issues from PM 0.18 to 0.23
of SR-189 and from PM 20.8 to 20.85 of SR-18

Date: Wednesday 6/6/01 **Time:** 1:00 - 3:30PM **Place:** District 8, Room 1120

Attendees	Representing	Phone Number
Joe Crump	Right of Way	(909) 383-4737
Bill Kerr	Maintenance	(909) 337-3181
Edward W. Prescott	Maintenance	909-867-2102
DENNIS MEISENBACH	MTCE	909-337-3181
Nhan Nguyen	MTCE	(909) 383-4219
Christie Hammond	Env. Cultural Studies	(909) 383-6933
DAVE COOPER	Proj. Mgt	(909) 383-4588
NATIB CHALLITA	DPS	909 383-5942
Iwan Risman	Ops	909/ 383-4084
Larry Hensley	Mtce	909 383 6299
Kelly Cohen	Biology	909 383 6311
Gary Wintergerst	Proj Mgt	909 383-6334
George Morhig	Proj. Mgt	909 388-7165

DEPARTMENT OF TRANSPORTATION

District 8 - Maintenance Engineering

PRELIMINARY COST ESTIMATE**Project:***Reconstruct eroded slope and existing roadway width to standard*

CALCULATED BY: Nhan Nguyen

DATE: 6/26/01

CHECKED BY: Basem Muallem

DATE: 6/26/01

COUNTY	ROUTE	PM	LOCATION			
SBd	189	0.18/0.23	Rimforest			
Item	Item Code	Description	Unit	Estimated Quantity	Unit Price	Item Total
1	120100	Traffic Control (\$3000/day)	day	10	\$3,000	\$30,000
2	150769	Remove Asphalt Concrete	m2	500	\$15	\$7,500
3	151572	Reconstruct MBGR (Eastbound of SR-189)	m	100	\$90	\$9,000
4	160120	Remove Tree	ea	15	\$800	\$12,000
5	192036	Structure Excavation (Crib Wall)	m3	5000	\$15	\$75,000
6	192067	Structure Excavation (Retaining Wall)	m3	5000	\$15	\$75,000
7	193012	Structural Backfill (Crib Wall)	m3	5000	\$15	\$75,000
8	193013	Structure Backfill (Retaining Wall)	m3	5000	\$15	\$75,000
9	260201	Class 2 Aggregate Base	m2	500	\$17	\$8,500
10	390101	Asphalt Concrete	m2	500	\$30	\$15,000
11	510060	Extend Exist 250' of 18' Ht Reinforced Conc. Retaining Wall (North Side of SR-189)	m3	800	\$450	\$270,000
12	513603	Construct Reinforced Concrete Cribwall (South Side of SR-189)	m2	800	\$300	\$240,000
13		Remove/Reconstruct existing stack rock retaining wall	ls	1	10000	\$10,000
		Structures				N/A
		R/W (Easement)	ls	1	\$5,000	\$5,000
		Utilities (Relocation)	ls	1	\$60,000	\$60,000
Subtotal (Roadwork)						\$902,000
Contingencies (15%)						\$136,000
TOTAL COST (Roadwork)						\$1,038,000
Total Construction Cost (Roadwork+Str+R/W+Utilities) \$1,038,000 + \$0 + \$5,000 + \$60,000						\$1,103,000
Engineering & Administration Service (20%) \$1,103,000 x 0.20						\$221,000
TOTAL PROJECT COST						\$1,324,000

Cost Est Form by Nhan Nguyen



Calendar Entry

☐ Appointment ☒ Invitation ☐ Event ☐ Reminder ☐ Anniversary

Brief description:

Meeting regarding safety, operations and maintenance issues on SR-189 and SR-18
Room: 1120, 11th Floor

Date: 05/08/2008 Time: 02:00 PM - 03:00 PM
☐ Pencil in ☐ Not for public viewing

Detailed description:

The Maintenance Unit hereby requests for all related parties to attend this meeting regarding the safety, operations and maintenance issues from PM 0.18 to 0.23 of SR-189 and from PM 20.8 to 20.85 of SR-18.

Problems:

1. Local Maintenance office received numerous complains from the commuters that the existing roadway width on SR-189 at approximate PM 0.23 is substandard (existing lane width is 9' to 9.5').
2. The existing 100 feet of stackwall on SR-189 at approximate PM 0.23 is falling apart.
3. The existing slope on eastbound direction of SR-189 is eroded resulting failure of support MBGR and roadway.

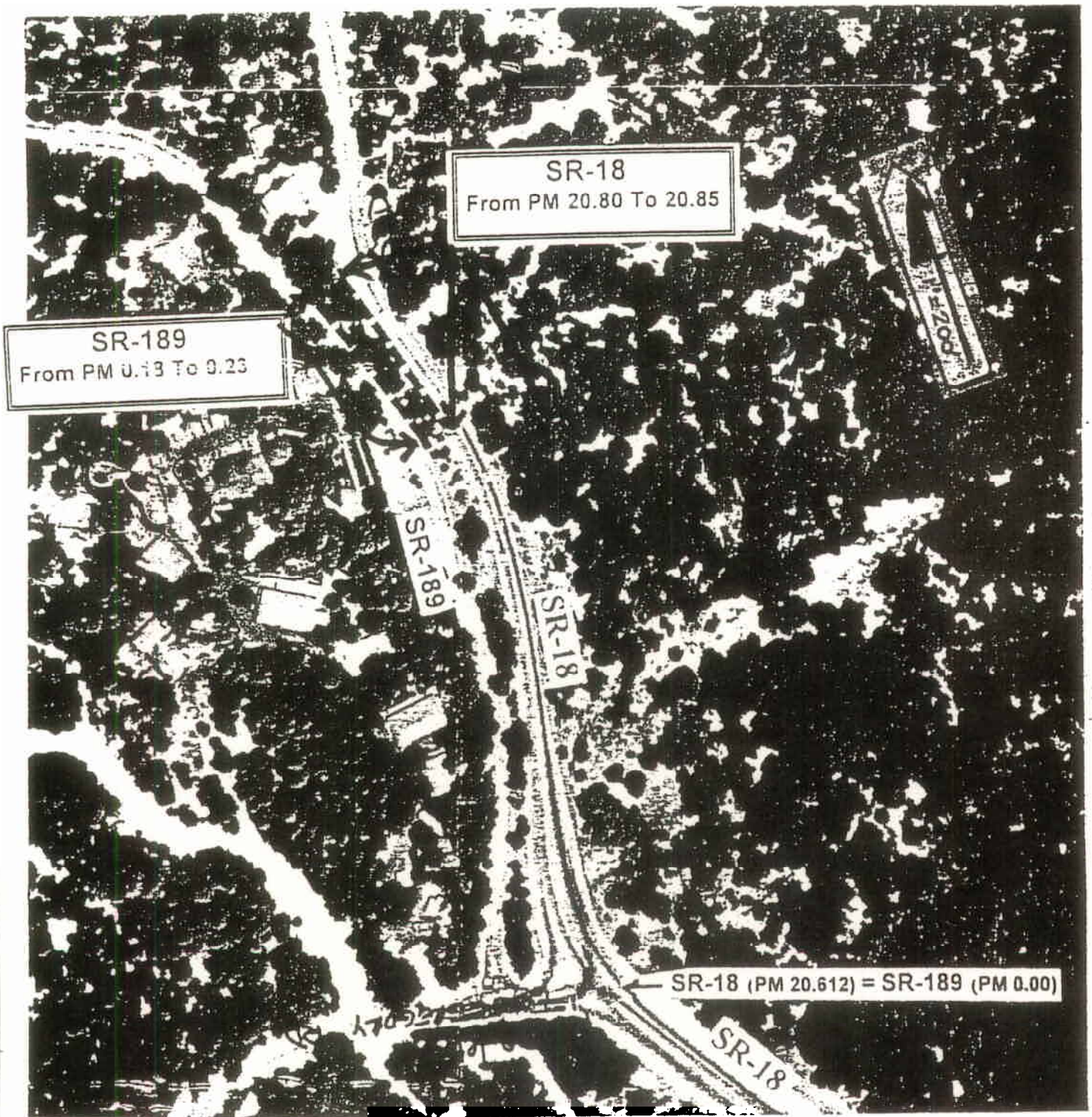
Solutions:

Will be discussed in the meeting

Nhan Nguyen for Basem Muallem (Maintenance Project Manager)

Invitations have been sent to: Basem Muallem/D08/Caltrans/CAGov@DOT, George Morhig/D08/Caltrans/CAGov@DOT, Dave Cooper/D08/Caltrans/CAGov@DOT, Morgan Choate/D08/Caltrans/CAGov@DOT, Summer Baker/D08/Caltrans/CAGov@DOT, Larry Heasley/D08/Caltrans/CAGov@DOT, Gary Wintergerst/D08/Caltrans/CAGov@DOT, David Bricker/D08/Caltrans/CAGov@DOT, Kelly Cohen/D08/Caltrans/CAGov@DOT, George Fink/D08/Caltrans/CAGov@DOT, Dennis Messenbach/D08/Caltrans/CAGov@DOT, Syed Raza/D08/Caltrans/CAGov@DOT, Brian Hirman/HQ/Caltrans/CAGov@DOT

Display invite responses



LOCATION MAP

SBD-18-20.80/20.85 (KP 33.47/33.55)

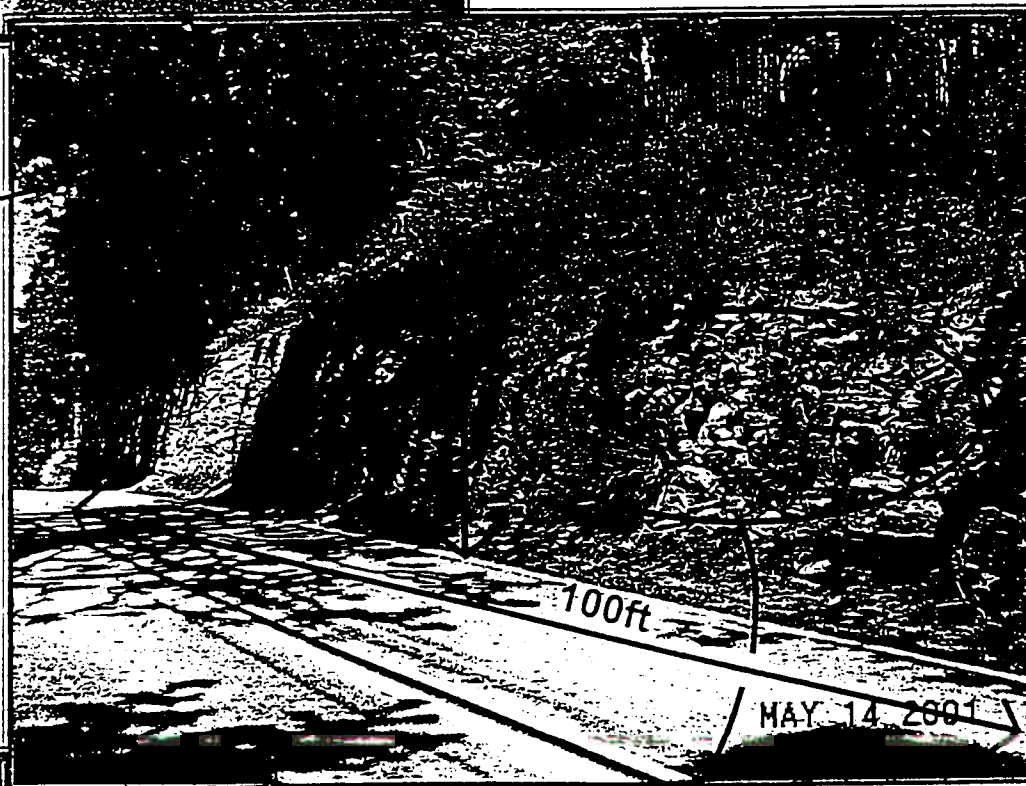
SBD-189-0.18/0.23 (KP 0.29/0.37)

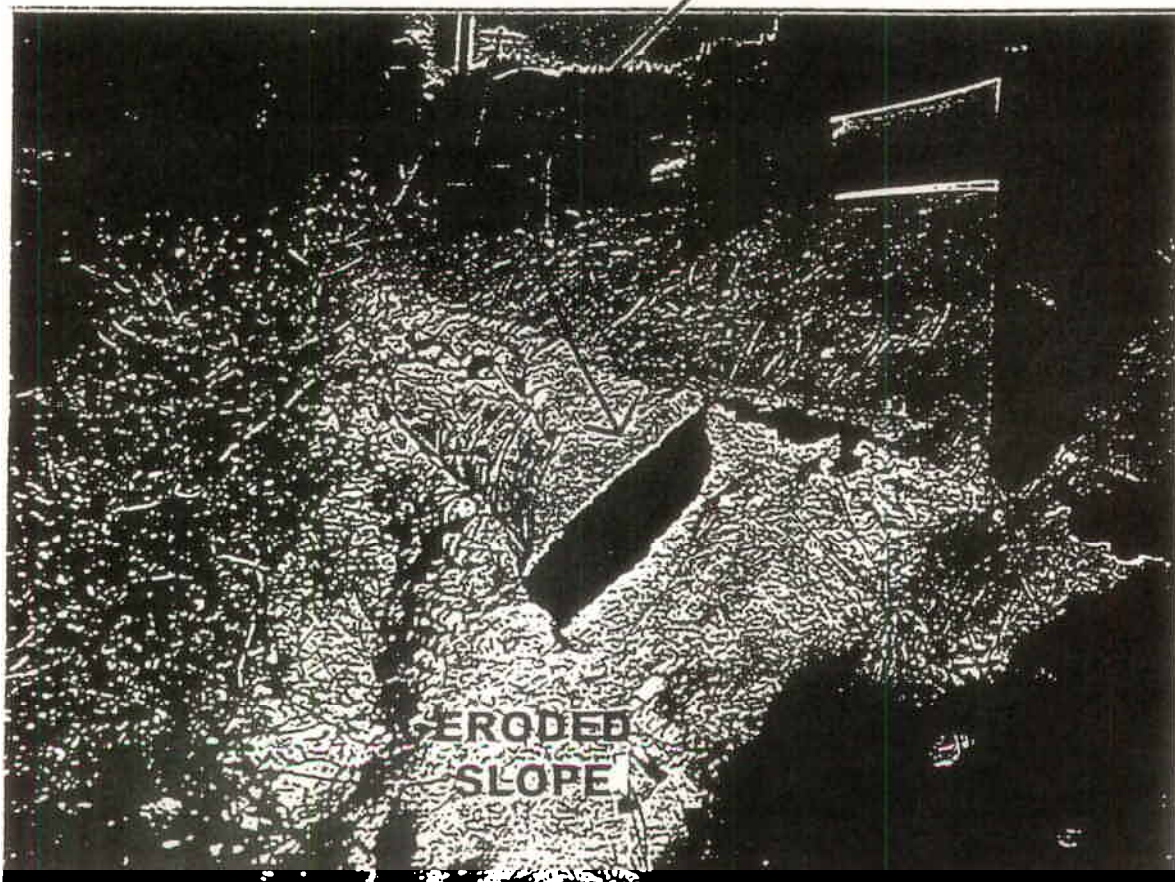
In Rimforest

**Failure of center section
of westbound stackwall
SR-189 @ PM 0.23**



Exist R/W is 3ft
from face of wall

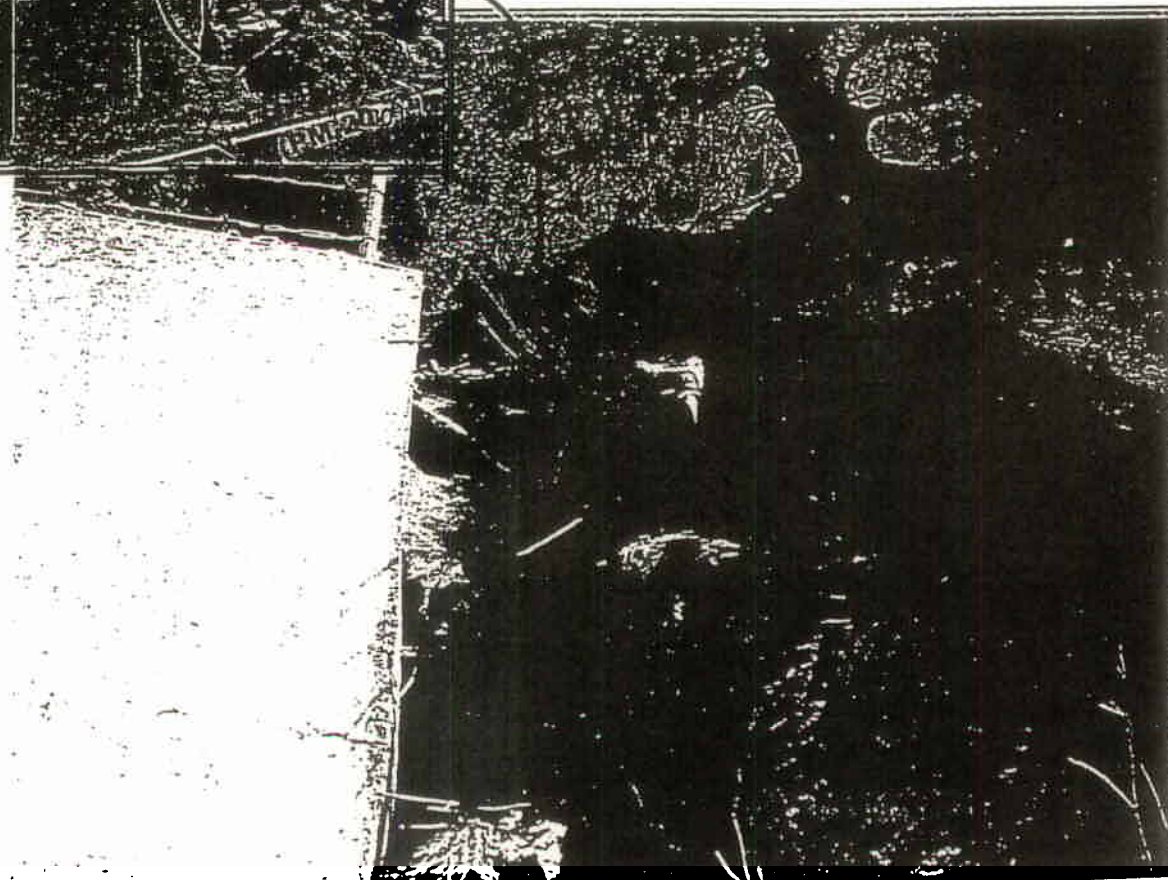
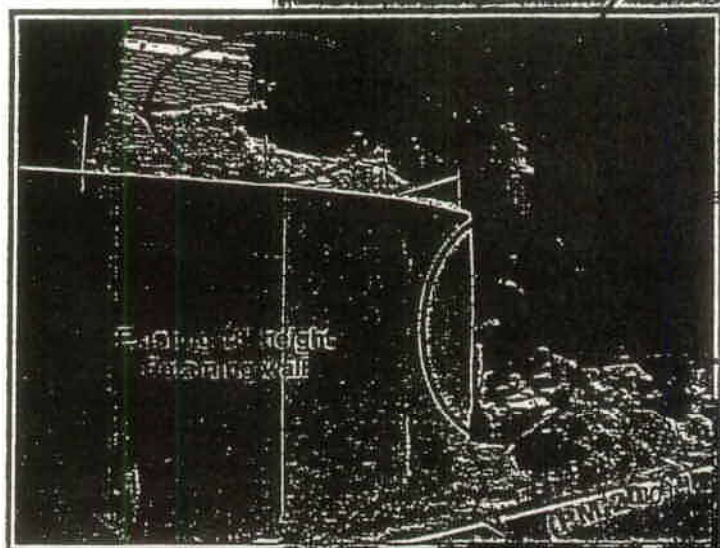




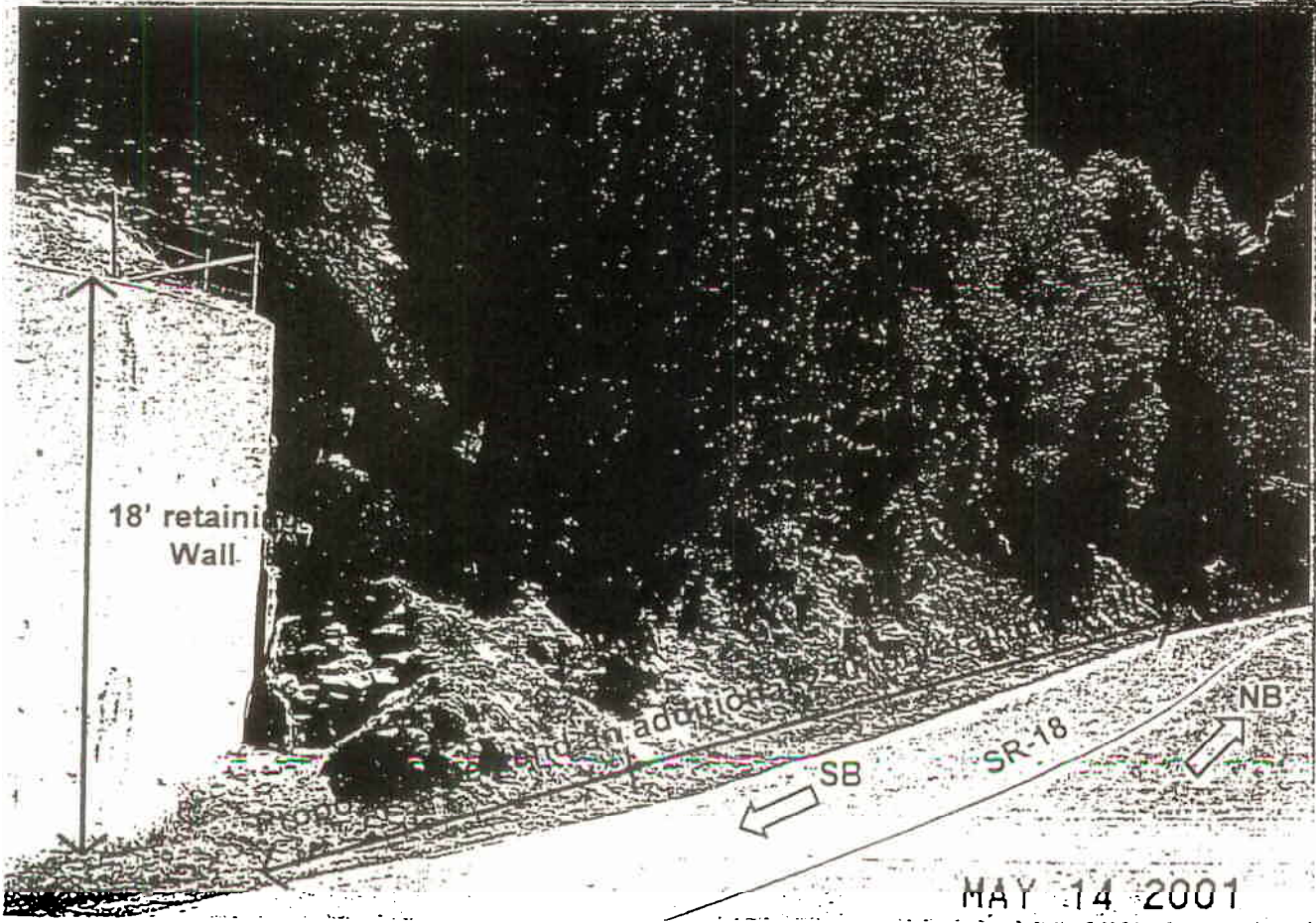
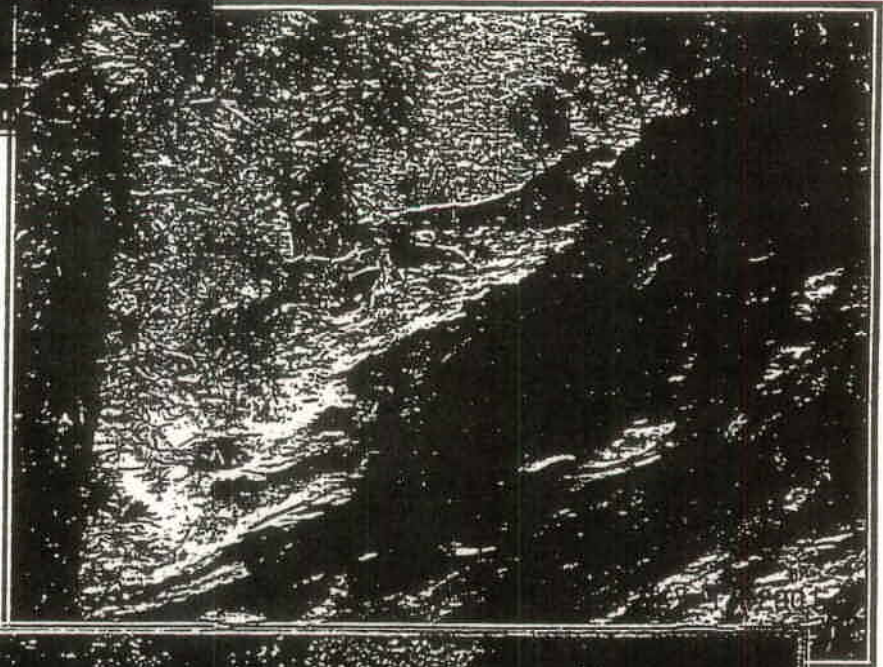
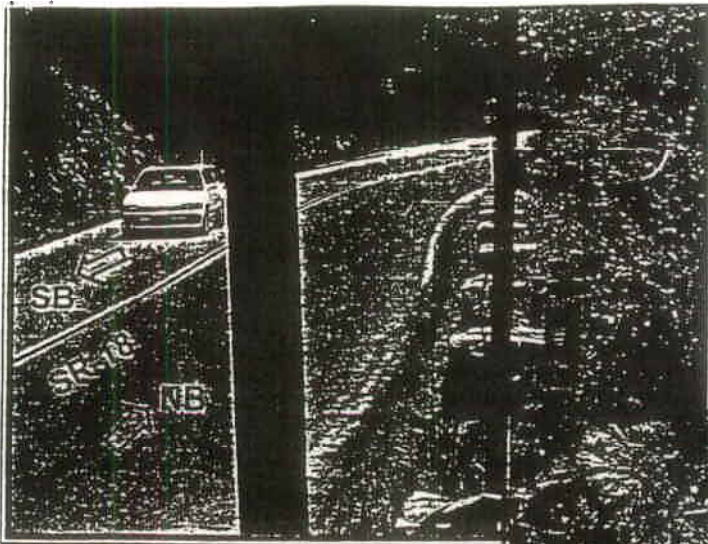


TYPICAL ERODED SLOPE LOCATION

ON SR-189 @ PM 0.23



Project Location
SR-18, PM 20.71



MAY 14 2001

PROJECT INITIATION PROPOSAL (PIP)
CAPITAL OUTLAY

DATE REC IN PROG MGMT JUL 02 2001 E.A. _____
Created in PMCS by: _____
Created in File Maker Pro by: _____

PIP NUMBER 2417
Date: _____
Date: _____

A. LOCATION: SBD-18-20.80/20.85 & SBD-189-0.18/0.23
Co-Rte-PM

Approximate 0.18 Miles East of Jct Rte 18

In Rimforest

Originating Branch Maintenance Engineering
Contact Person Nhan (x4219)/Larry (x6299)

Date 6/27/01

Geographic
Branch Chief Basem Muallem
Telephone Ext. 4278

PROBLEM:

The existing stack rock on westbound of SR-189 is deteriorating.

The existing metal beam guardrail on eastbound of SR-189 is erosion of 1/2 to 1 experience
slope that parallels SR-18 from approximate PM 20.80 to 20.85. The existing lane width on SR-189 at this location
See attached photos for more details.

SOLUTION(S): needs to be widened.

It is proposed to reconstruct existing stack rock on west bound of SR-189; construct reinforced concrete cribwall and new metal beam guard rail on the south side of SR-189 to accommodate the current standard lane and shoulder width. Also, Extend existing concrete retaining wall on north side of SR-18 at approximately 250 feet to the east to stabilize the eroding slope. See attached "MEETING MINUTES" dated June 6, 2001 for more information.

Total Project Cost	(Con + R/W + Eng):	\$1,324,000		
Const: Roadwork	\$1,038,000	Structures	\$0	
Const: Total Cost	\$1,038,000	State Share	\$1,032,000	Local Share N/A
R/W: Acquisition	\$5,000	Utilities	\$60,000	
R/W: Total Cost	\$65,000	State Share	\$65,000	Local Share N/A
ENGR: Total Cost	\$221,000	State Share	\$218,000	Local Share N/A

B. PROGRAM MANAGEMENT: TRAMS - 201,150

Pgm HA42 Elem RAS Fund Source: FED: X
Project Manager: G. Wintergerst STA: _____
Functional Manager: _____ LOC: _____
Project Engineer: _____

Major: X
Shopp X Stip _____ Loc/Meas _____
Minor: _____ FY: PND
Needs Coop Agree: Yes _____ No X

Comments:

Permit Req: No _____ Yes _____ Type _____

If approved, project will be eligible for SHOPP funds. OK for review. MC
Project requires a programming document. JT.
Date: 7-2-01

C. REVIEWER COMMENTS:

Request Staff Review

I believe project must be HA 42 due to retaining wall requirements, severe weather could result in loss of one or both lanes on Rte 189 if corrective measures are not taken.
possibility of Environmental/Cultural issue on N side of Rte 189.

Reviewer G. Wintergerst

Date: 7/19/2001

D. FINAL DISPOSITION:

Project Approved: _____ as submitted _____ with conditions or revisions indicated

Project Rejected: _____

COMMENTS:

PROJECT INITIATION PROPOSAL (PIP)
CAPITAL OUTLAY

DATE REC IN PROG MGMT Jul 02 2001 E.A.

PIP NUMBER

2417

Created in PMCS by:

Date:

Created in File Maker Pro by:

Date:

A. LOCATION: SBd-18-20.80/20.85 & SBD-189-0.18/0.23

Approximate 0.18 Miles East of Jct Rte 18

Co-Rte-PM

In Rimforest

Originating Branch Maintenance Engineering

Date 6/27/01

Geographic

Contact Person

Nhan (x4219)/Larry (x6299)

Branch Chief Basem Muallem

Telephone Ext. 4278

PROBLEM:

The existing stack rock on westbound of SR-189 is deteriorating.

The existing metal beam guardrail on eastbound of SR-189 is eroding of 1/2 to 1 experience slope that parallels SR-18 from approximate PM 20.80 to 20.85. The existing lane width on SR-189 at this location

See attached photos for more details.

SOLUTION(S): needs to be widened.

It is proposed to reconstruct existing stack rock on west bound of SR-189; construct reinforced concrete cribwall and new metal beam guard rail on the south side of SR-189 to accommodate the current standard lane and shoulder width. Also, Extend existing concrete retaining wall on north side of SR-18 at approximately 250 feet to the east to stabilize the eroding slope. See attached "MEETING MINUTES" dated June 6, 2001 for more information.

Total Project Cost	(Con + R/W + Eng):	\$1,324,000		
Const: Roadwork	\$1,038,000	Structures	\$0	
Const: Total Cost	\$1,038,000	State Share	\$1,032,000	Local Share N/A
R/W: Acquisition	\$5,000	Utilities	\$60,000	
R/W: Total Cost	\$65,000	State Share	\$65,000	Local Share N/A
ENGR: Total Cost	\$221,000	State Share	\$218,000	Local Share N/A

B. PROGRAM MANAGEMENT:

TRAMS - 201,150

Pgm HA42 Elem RAS

Fund Source: FED: X

Major: X

Project Manager: G. Wintergerst

STA:

Shopp X Stip Loc/Meas

Functional Manager:

LOC:

Minor: FY: PND

Project Engineer:

Needs Coop Agree: Yes No X

Comments:

Permit Req: No Yes Type

If approved, project will be eligible for SHPP funds. OK for review. MC
Project requires a programming document. Jt.

Date: 7-2-01

C. REVIEWER COMMENTS:

Request Staff Review

K-rail was not an item of work
Flagging or pilot car may be needed traffic
item not large enough. Any possibility of closing
during construction or detour use? Yes

Reviewer

Date: 7-20-01

D. FINAL DISPOSITION:

Project Approved: as submitted

 with conditions or revisions indicated

Project Rejected:

COMMENTS:

PROJECT INITIATION PROPOSAL (PIP)
CAPITAL OUTLAY

DATE REC IN PROG MGMT Jul 02 2001 E.A. _____
Created in PMCS by: _____
Created in File Maker Pro by: _____

PIP NUMBER

2417

Date: _____

Date: _____

A. LOCATION: SBD-18-20.80/20.85 & SBD-189-0.18/0.23
Co-Rte-PM

Approximate 0.18 Miles East of Jct Rte 18

In Rimforest

Geographic

Originating Branch Maintenance Engineering

Date 6/27/01

Branch Chief Basem Muallem

Contact Person Nhan (x4219)/Larry (x6299)

Telephone Ext. 4278

PROBLEM:

The existing stack rock on westbound of SR-189 is deteriorating.

The existing metal beam guardrail on eastbound of SR-189 is erosion of 1/2 to 1 slope that parallels SR-18 from approximate PM 20.80 to 20.85. The existing lane width on SR-189 at this location See attached photos for more details.

SOLUTION(S): needs to be widened.

It is proposed to reconstruct existing stack rock on west bound of SR-189; construct reinforced concrete cribwall and new metal beam guard rail on the south side of SR-189 to accommodate the current standard lane and shoulder width. Also, Extend existing concrete retaining wall on north side of SR-18 at approximately 250 feet to the east to stabilize the eroding slope. See attached "MEETING MINUTES" dated June 6, 2001 for more information.

Total Project Cost	(Con + R/W + Eng):	\$1,324,000		
Const: Roadwork	\$1,038,000	Structures	\$0	
Const: Total Cost	\$1,038,000	State Share	\$1,032,000	Local Share N/A
R/W: Acquisition	\$5,000	Utilities	\$60,000	
R/W: Total Cost	\$65,000	State Share	\$65,000	Local Share N/A
ENGR: Total Cost	\$221,000	State Share	\$218,000	Local Share N/A

B. PROGRAM MANAGEMENT: TRAMS - 201,150

Pgm HA42 Elem RAS Fund Source: FED: X

Project Manager: G. Wintergerst STA: _____

Functional Manager: _____ LOC: _____

Project Engineer: _____

Comments:

If approved, project will be eligible for SHOPP funds. OK for review. MC
Project requires a programming document. JT.

Major: X Shopp X Stip _____ Loc/Meas _____

Minor: _____ FY: PND

Needs Coop Agree: Yes _____ No X

Permit Req: No _____ Yes _____ Type _____

Date: 7-2-01

C. REVIEWER COMMENTS:

Request Staff Review

I concur with problem solution concept. I am not certain about how appropriate it is to split the project into phases.

Reviewer

David L. Boud.

Date:

7/6/01

D. FINAL DISPOSITION:

Project Approved: _____ as submitted

with conditions or revisions indicated

Project Rejected: _____

COMMENTS:

PROJECT INITIATION PROPOSAL (PIP)
CAPITAL OUTLAY

DATE REC IN PROG MGMT Jul 02 2001 E.A.

PIP NUMBER

2417

Created in PMCS by: _____

Date: _____

Created in File Maker Pro by: _____

Date: _____

A. LOCATION: SBd-18-20.80/20.85 & SBD-189-0.18/0.23

Approximate 0.18 Miles East of Jct Rte 18

Co-Rte-PM

In Rimforest

Geographic

Originating Branch

Maintenance Engineering

Date

6/27/01

Branch Chief Basem Muallem

Contact Person

Nhan (x4219)/Larry (x6299)

Telephone Ext. 4278

PROBLEM:

The existing stack rock on westbound of SR-189 is deteriorating.

The existing metal beam guardrail on eastbound of SR-189 is erosion of 1/2 to 1 slope that parallels SR-18 from approximate PM 20.80 to 20.85. The existing lane width on SR-189 at this location See attached photos for more details.

SOLUTION(S): needs to be widened.

It is proposed to reconstruct existing stack rock on west bound of SR-189; construct reinforced concrete cribwall and new metal beam guard rail on the south side of SR-189 to accommodate the current standard lane and shoulder width. Also, Extend existing concrete retaining wall on north side of SR-18 at approximately 250 feet to the east to stabilize the eroding slope. See attached "MEETING MINUTES" dated June 6, 2001 for more information.

Total Project Cost	(Con + RW + Eng):	\$1,324,000		
Const: Roadwork	\$1,038,000	Structures	\$0	
Const: Total Cost	\$1,038,000	State Share	\$1,032,000	Local Share N/A
R/W: Acquisition	\$5,000	Utilities	\$60,000	
R/W: Total Cost	\$65,000	State Share	\$65,000	Local Share N/A
ENGR: Total Cost	\$221,000	State Share	\$218,000	Local Share N/A

B. PROGRAM MANAGEMENT: TRAMS - 201,150

Pgm HA42 Elem RAS Fund Source: FED: X

Project Manager: G. Wintergerst STA: _____

Functional Manager: _____ LOC: _____

Project Engineer: _____

Comments: _____

Major: X

Shopp X Stip _____ Loc/Meas _____

Minor: _____ FY: PND

Needs Coop Agree: Yes _____ No X

Permit Req: No _____ Yes _____ Type _____

If approved, project will be eligible for SHOPP funds. OK for review. MC
Project requires a programming document. JT.

Date: 7-2-01

C. REVIEWER COMMENTS:

Request Staff Review

Need R/W Data Sheet, Utility Search.
Will we need a permit from USFS

Reviewer

George J. Smith

Date: 7/19/01

D. FINAL DISPOSITION:

Project Approved: _____ as submitted

with conditions or revisions indicated

Project Rejected: _____

COMMENTS:

EXHIBIT I
PROJECT CATEGORY APPROVAL

M e m o r a n d u m

To: MR. KENNETH NELSON
Design

Date: May 9, 2002

From: **DEPARTMENT OF TRANSPORTATION**
OWEN SPENCER, DESIGN B - MS 9-71

File: 08-SBd-18/189 KP 33.172
(PM 20.612)
Reconst slopes, stackwall
on Rte 189 and extend
retaining wall on Rte 18
08221 - 1A900K

Subject: Project Category Approval

Approval is requested for the above-referenced project to be assigned Category 4B in accordance with the requirements in Chapter 8, Section 5, of the Project Development Procedures Manual, seventh edition.

It is proposed to reconstruct slopes, replace existing stack rock on westbound SR189, widen existing lane and shoulder widths to current standard, and restore metal beam guardrail on eastbound SR 189. The proposed project also extends the retaining wall on the north side of SR 18 to stabilize the eroded slope.

A Category 4B approval is requested for this project because it meets the following criteria:

1. No new right of way is required
2. No increase traffic capacity
3. A Negative Declaration is probably required

Attached for your use is a copy of the Right of Way Data Sheet. If you have any questions, or additional concerns, please contact me at ext. 6223 or Dat Wong at ext.1062.

Approved by:


KENNETH NELSON, DDD
Design

5/9/02
Date

Attachment

c: SBaker, Environmental Control, MS 12-34
MSAbdelgwad, R/W, MS-M
GWintergerst, Project Manager, MS 12-29
File

JM/ym

EXHIBIT J
WORK PLAN

WORKPLAN AGREEMENT

EA: **1A900**

CO.-RTE.-PM : **SB -018 -20.8 /20.9**

PROGRAMMING :

Program Document Program Funding FY PPNO State AAA:
 PriList HA42 YES

PROJECT LOCATION : Also Sbd-189-0.0/0.23. Nr Rim Forest About 1.3 Km E/o Jct Rte 18/189

WORK DESCRIPTION: Reconstruct Slopes, Stack Wall, Widen Lane & Shoulder On Rte 189 And Extend Retaining Wall On Rte 18

PROJECT MANAGER : Gary Wintermant PROJECT ENGINEER : Wong DESIGN SENIOR : Owen Spencer

CONSTRUCTION SENIOR: _____

COST ESTIMATES: Bridges Roadway Total Const R/W Support STATE TOTAL Local Const Local R/W Local Support LOCAL TOTAL PROJECT TOTAL
 Programmed _____
 Current Est 3 368 3 368 23 1 856 5 247 _____

MILESTONES:		010	015	020	100			120	160	200	224	225	300	378	380	410	460	480	500	600	800
		PID	PROG	BEG ENV	APP DPR	NOP	DED	CIR DED	FED	PA & ED	RW MAP	REG RW	CIR DIST	STR PS&E	PS&E HQ	RW CERT	RTL	ADV	APR CON	CCA	END PR
Current:		4/1/02		10/1/03	1/1/04			4/5/04	4/5/04	11/1/04				8/1/05	12/1/05	1/2/06	2/1/06	4/3/06	6/1/06	3/2/07	8/1/07
Proposed:		4/1/02	4/1/02	10/1/03	1/1/04			4/5/04	4/5/04	11/1/04		2/2/05	8/1/05	8/1/05	12/1/05	1/2/06	2/1/06	4/3/06	6/1/06	3/2/07	8/1/07

HQ Appointments: _____

	WBS	WBS Description	Unit	Unit %Work Complete	Work (Hours)	Actual Work (Hours)	Work Contour	Start_Date	Finish_Date	Project Manager Review
1	100	Project Management	08.285 Frank Bocanegra PS&E	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
2	100	Project Management	08.309 Dick Beckley Right Of Way Engineering	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
3	100	Project Management	08.330 Martin Tatera CADD Support	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
4	100	Project Management	08.365 Manuel Jabson Operations Services	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
5	100	Project Management	08.367 Farsha Zinnurayan Operations-Surveillance	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
6	100	Project Management	08.390 Tony Sarmiento Electrical Operations	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
7	100	Project Management	08.605 Manoj Kar Maintenance Engineering	Baseline: — Current: — FM Proposed: —	10	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
8	100	Project Management	59.541 ESC 59 541 Field Const	Baseline: — Current: — FM Proposed: —	100	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
9	100	Project Management	08.147 Robert So Capital Outlay Management	Baseline: — Current: — FM Proposed: —	15	—		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed
10	100	Project Management	08.327 Bruce Kean Materials Engineering	Baseline: — Current: — FM Proposed: —	15	2		1/1/02	8/1/07	<input type="radio"/> Request Review <input type="radio"/> Reviewed

E.A. 1A900: SBd-18-20.80/20.85 & SBd-189-0/0.23

Construct Cribwall & Guard Rail, Stabilize Slope, Widen SR-189

IS/EA

Project Manager: G Wintergerst
Design Senior: O Spencer

Generalist: J Walsh
Biologist: K Cohen
Culturalist: C Hammond

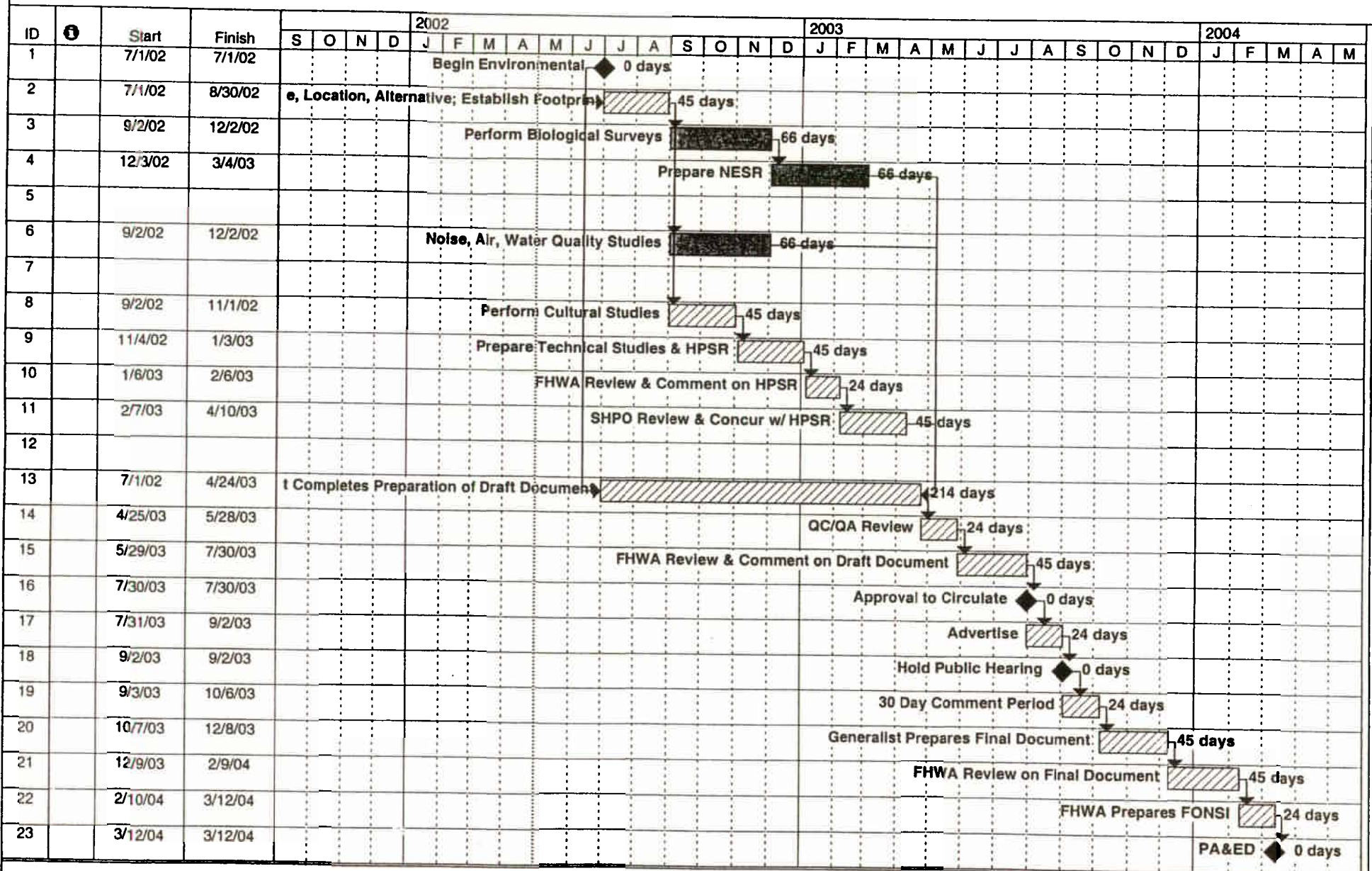
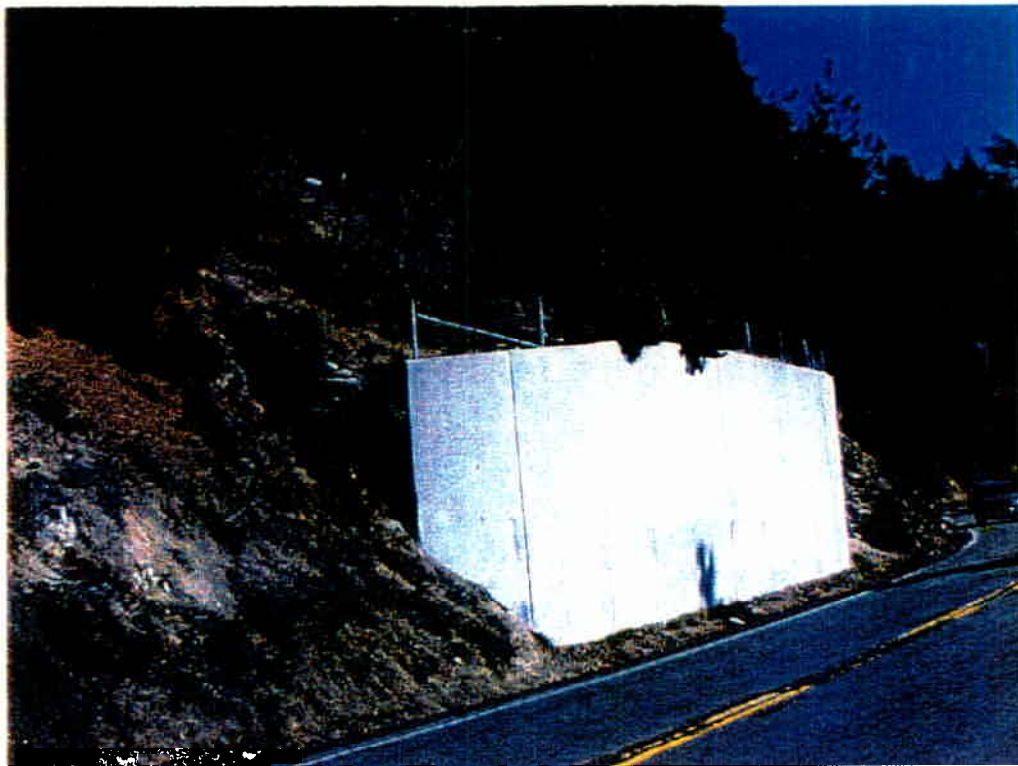


EXHIBIT K
PHOTOS



SACKED-CONCRETE WALL ABOVE RETAINING WALL



TYPE 1 RETAINING WALL ON STATE ROUTE 18

EXHIBIT L
PSR PERFORMANCE MEASURES

PSR Performance Measures
For EA: 1A900K

SCOPE

Yes No

- ☒ ☐ • Is the "Need and Purpose" clearly defined and written in accordance with applicable permitting agency requirements?
- ☒ ☐ • Do the alternatives stay within scope or solve problem identified in "Need and Purpose"?
- ☒ ☐ • Does the scope incorporate required allied projects such as Traffic Management System (TMS) elements, replacement planting, environmental mitigation, maintenance needs, and relinquishment requirements?
- ☒ ☐ • Have non-standard features, if any, been approved using established guidelines?
- ☒ ☐ • Is scope consistent and coordinated with local, regional and state system plans?

Scope Confidence Rating: 5
1 low to 5 high

COST

Yes No

- ☒ ☐ • Is the estimate realistic and in accordance with established guidelines?
Does it include a sum for contingencies consistent with risk?
- ☒ ☐ • Does the cost incorporate required allied projects such as TMS elements, replacement planting, environmental mitigation, relinquishment requirements?
- ☒ ☐ • Is the right of way cost developed in accordance with established guidelines and consistent with anticipated needs?
- ☐ ☒ • Were benefit/cost ratios and/or the data to calculate them provided?
- ☒ ☐ • Were funding sources and commitments identified? Is proposed funding program consistent with project type?
- ☒ ☐ • Were support costs identified in a manner consistent with SB 45 and CTC Guidelines and supported by a complete project work plan?

Cost Confidence Rating: 4
1 low to 5 high

SCHEDULE

Yes No

- ☒ ☐ • Is time allowed for environmental evaluation and construction commensurate with anticipated studies and work windows (e.g., hazardous waste, endangered or season-specific species)?
- ☒ ☐ • Does the schedule incorporate required allied projects such as TMS elements, replacement planting, environmental mitigation, relinquishment requirements
- ☒ ☐ • Is Right of Way time provided consistent with anticipated needs, including railroad and utilities?

Schedule Continued:

Yes No

- ☒ ☐ • Is the schedule consistent with district resource capacity and based on an approved project work plan?
- ☐ ☐ • Do local stakeholders agree with the schedule?
- ☒ ☐ • Is schedule consistent and coordinated with local, regional and state plans?

Schedule Confidence Rating: 5
1 low to 5 high

QUALITY

Yes No

- ☒ ☐ • Was the range of alternatives identified and evaluated consistent with the need and purpose of the project?
- ☒ ☐ • Was the preliminary design, right-of-way, traffic and environmental effort adequate to confidently establish scope, schedule and estimate?
- ☒ ☐ • Were the studies adequate to identify all project stakeholders such as permitting agencies and community groups, and their anticipated levels of involvement?
- ☒ ☐ • Were there adequate peer reviews such as district functional units, safety, maintenance and constructability reviews, value analysis, and OPPD so to alleviate any undue risk?

Quality Confidence Rating: 5
1 low to 5 high

Overall PSR Confidence Score **Total: 19 x 5 = 95**

Note: Add above individual section confidence ratings and multiply by 5 to obtain overall confidence score. A score of less than 70 indicates "High Risk."

Other:


Explain any "No" responses as appropriate:

Note: Any "No" boxes checked indicate a high risk and potential future problems

No attempt was made to quantify benefit/cost ratio.

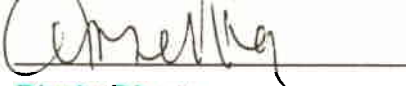
PSR development support costs: \$ 60,000

Prepared By:


Project Manager

8/1/2002
Date

I have read and approve this evaluation:


District Director

8/5/02 ✓
Date